



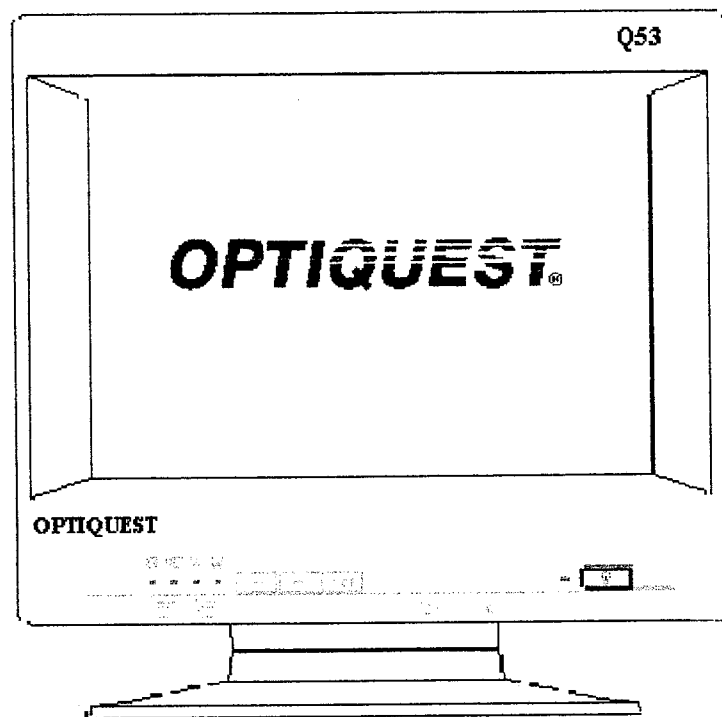
V20855

Service Manual

OPTIQUEST Q53

Model No. VCDTS21359-1

15" Digital Controlled Color Monitor



(Rev. 1 - May 1997)

ViewSonic® 381 Brea Canyon Rd., Walnut, California 91789 USA - (800) 888-8583

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1. SPECIFICATIONS FOR Q53 COLOR MONITOR

CRT:	Size:	15-inch Diagonal Flat Square Type
	Viewable Size:	13.7-inch Diagonal
	Dot Pitch:	0.28mm
	Deflection:	90° Degree
DISPLAY:	Size:	260mm x 195mm
	Diagonal Size:	349mm
	Color:	Unlimited Colors
	Resolution:	Up to 1280 x 1024
	Video Bandwidth:	70MHz/(-3dB)
INPUT SIGNAL:	Video Signal:	RGB Analog 0.7Vpp 75 Ohms
	Sync. Signal:	H/V. Separated, H/V. Composite TTL. Level Positive or Negative.
	Scanning Freq.:	30 KHz to 70 KHz for Horizontal
		50 Hz to 90 Hz for Vertical
POWER SOURCE:	Power Supply:	AC 100-240V, 50Hz/60Hz
	Power Consumption:	100W Max.
DIMENSIONS:	Monitor:	14.96"(W) x 14.72"(H) x 15.35"(D)
		380mm(W) x 374mm(H) x 390mm(D)
	Carton:	19.2"(W) x 16.8"(H) x 18.4"(D)
		488mm(W) x 429mm(H) x 468mm(D)
WEIGHT:	Net (Gross) Weight:	27.5 (32) Lbs
		12.5 (14.5) Kg

POWER MANAGEMENT

The Power Management states are controlled by the presence and/or absence of horizontal and vertical sync signals according to the following:

STATE	H.Sync	V.Sync	Power (normal)
ON	ON	ON	95WATTS
STANDBY	OFF	ON	25WATTS
SUSPEND	ON	OFF	25WATTS
OFF	OFF	OFF	8WATTS

2. PRECAUTION AND NOTICES

2-1 SAFETY PRECAUTIONS

1. Observe all caution and safety related notes located inside the display cabinet.
2. Operation of the display with the cover removed, may cause a serious, shock hazard from the display power supply. Work on the display should not be attempted by anyone who is not thoroughly familiar with the necessary precautions when working on high voltage equipment.
3. Do not install, remove or handle the picture tube in any manner unless shatter-proof goggles are worn. People who are not so equipped should be kept away while handling picture tube. Keep picture tube away from the body while handling.
4. The picture tube is constructed to limit X-RAY radiation to 0.5 mR/HR. For continued protection, use the designated replacement tube only, and adjust the voltages so that the designated maximum rating at the anode will not be exceeded.
5. Before returning a serviced display to the customer, a thorough safety test must be performed to verify that the display is safe to operate without danger or shock. Always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as screw heads. Test method for current leakage is described as follows:
 - (a) Plug the AC line cord directly into rated AC outlet (do not use a line isolation transformer during this check).
 - (b) Use an AC voltmeter having 5000 ohms per volt or with more sensitivity in the following manner: Connect a 1500 ohms 10 Watt resistor, paralleled by a 0.15mfd, AC type capacitor between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts simultaneously. Measure the AC voltage across the combination of 1500 ohms resistor and 0.15mfd capacitor.
 - (c) Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part.
 - (d) Voltage measured must not exceed 2.8 volts RMS. This corresponds to 2 milliamp AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

2-2 PRODUCT SAFETY NOTICE

Many electrical and mechanical parts in this chassis have special safety visual inspections and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltages, wattage, etc. Before replacing any of these components read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-RAY radiation or other hazards.

2-3 SERVICE NOTES

1. When replacing parts or circuit boards, clamp the lead wires around terminals before soldering.
2. When replacing a high wattage resistor (more than 1W of metal oxide film resistor) in circuit board, keep the resistor about 5mm away from circuit board.
3. Keep wires away from high voltage or high temperature components.
4. Keep wires in their original position so as to reduce interference.

2-4 HIGH VOLTAGE WARNING

Operation of monitor outside of cabinet or with back removed may cause a serious shock hazard. Work on these models should only be performed by those who are thoroughly familiar with precautions necessary when working on high voltage equipment.

Exercise care when servicing this chassis with power applied. Many B plus and high voltage terminals are exposed which, if carelessly contacted, can cause serious shock or result in damage to the chassis. Maintain interconnection ground lead connections between chassis and picture tube dag when operating chassis.

Certain HV failures can increase X-ray radiation. Monitor should not be operated with HV levels exceeding the specified rating for the chassis type. The maximum operating HV specified for the chassis used in this monitor is

25KV $\pm$ 1KV

with a line voltage of 120/240V AC. Higher voltage may also increase possibility of failure in HV Supply.

It is important to maintain specified values of all components in the horizontal and high voltage circuits and anywhere else in the monitor that could cause a rise in high voltage or operating supply voltages. No changes should be made to the original design of the monitor. Components shown in the shaded areas on the schematic should be replaced with exact factory replacement parts. The use of unauthorized substitute parts may create a shock, fire or other hazard.

To determine the presence of high voltage, use an accurate, high impedance, HV meter connected between second anode lead and CRT dag grounding device.

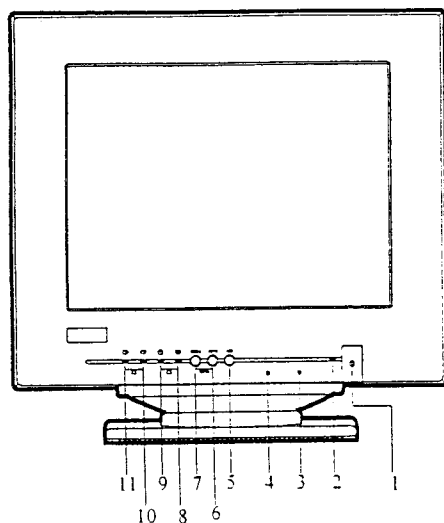
When servicing the High Voltage System, remove static charge from it by connecting a 10K ohm resistor in series with an insulated wire (such as a test probe) between picture tube dag and 2nd anode lead. (AC line cord disconnected from AC power outlet).

The picture tube used in this monitor employs integral implosion protection. Replace with tube of the same type number for continued safety. Do not lift picture tube by the neck. Handle the picture tube only after discharging the high voltage completely.

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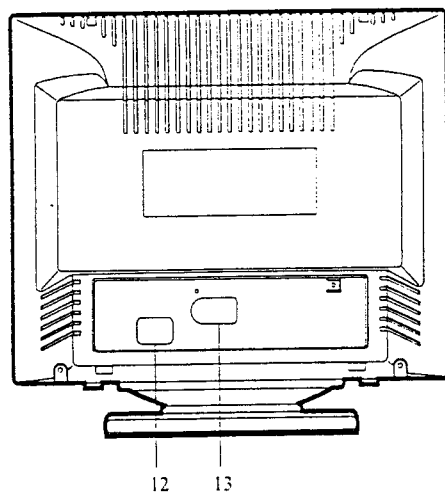
3. FRONT AND REAR VIEW

A. FRONT VIEW



1. POWER ON/OFF SWITCH
2. POWER ON/OFF INDICATOR
3. CONTRAST CONTROL
4. BRIGHTNESS CONTROL
5. FUNCTION SELECTION BUTTON
6. INCREASE BUTTON
7. DECREASE BUTTON
8. LED4
9. LED3
10. LED2
11. LED1

B. REAR VIEW



12. AC SOCKET
13. 15 PIN D-TYPE CONNECTOR

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4. TIMING DIAGRAM & TABLE

4-1 EXTERNAL CONTROL

SYMBOL	ITEM	DESCRIPTION
	1. POWER SWITCH	- CONTROLS TO THE MONITOR.
	2. ON/OFF & POWER MANAGEMENT INDICATOR	- WHEN LIT GREEN GIVES VISUAL CONFIRMATION OF POWER ON. - WHEN LIT ORANGE GIVES VISUAL CONFIRMATION OF POWER STANDBY OR SUSPEND MODE.
	3. CONTRAST	- ADJUSTING CONTRAST.
	4. BRIGHTNESS	- ADJUSTING BRIGHTNESS.
FUNC	5. FUNCTION SELECT	- SELECT ADJUSTING FUNTION TO SCROLL LED.
INC(+)	6. INCREASE	- INCREASE ADJUSTING FUNTION PARAMETER.
DEC(-)	7. DECREASE	- DECREASE ADJUSTING FUNTION PARAMETER.
	8. LED 4.	- V-SIZE INDICATOR.
	9. LED 3.	- V-CENTER INDICATOR.
	10.LED 2.	- H-SIZE INDICATOR.
	11.LED 1.	- H-CENTER INDICATOR.
INC(+)/DEC(-)	12.ITEM 6+7	- RECALL.
	13.ITEM 8+9	- KEYSTONE.
	14.ITEM 10+11	- PINCUSHION.

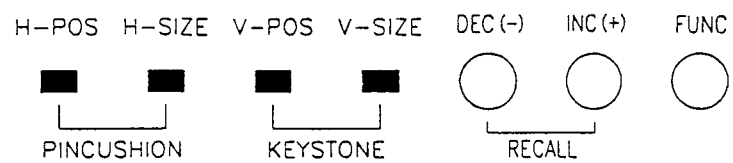
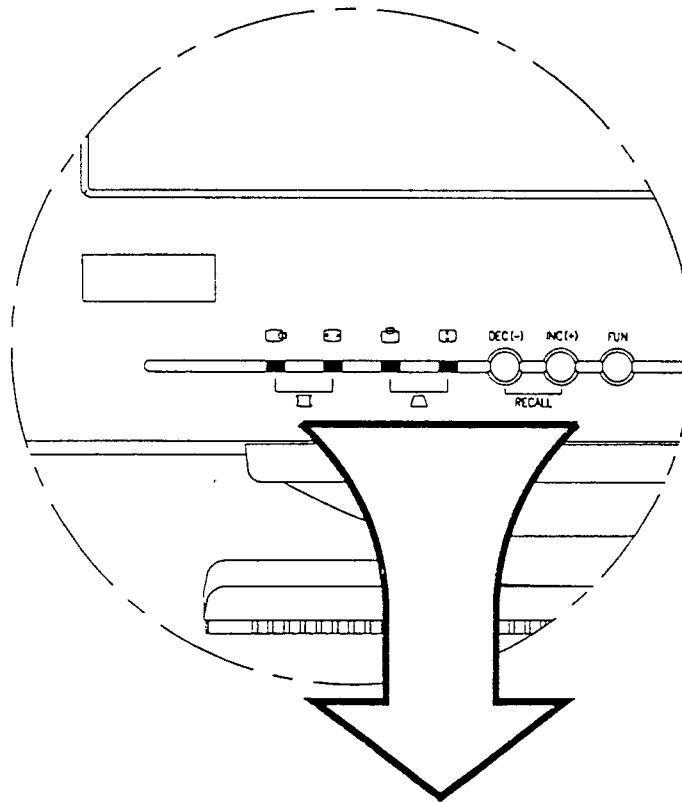
4-2 DIGITAL FEATURES

- 1.This monitor has adapted an advanced CPU to control the H-CENTER, the H-SIZE, the V-CENTER, the V-SIZE, PINCUSHION, KEYSTONE, and it will auto memory the image features whenever the user changed them.
- 2.This monitor includes 12 sets of factory preset timing (see the following table) and 15 sets of user's new timing.
- 3.Push up-down key together and wait 0.5 second, the image automatically recovery the same as factory preset.

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4-3 USING TACT SWITCH FUNCTIONS

- PRESS THE FUN BUTTON TO ACTIVATE THE LED AND SCROLL THROUGH THEM.
- TACT ICONS AND MENUS:



4-4 TIMING TABLE

MODE	RESOLUTION	H-SYNC POLARITY	V-SYNC POLARITY	(KHZ) H-FREQUENCY	(US) H-PERIOD	(US) FRONT PORCH	(US) SYNC WIDTH	(US) BACK PORCH	(US) BLK	(US) ACTIVE VIDEO
1.	VGA 720*400	-	+	31.486	31.778	0.6360	3.8135	1.9070	6.3565	25.4220
2.	VGA 640*480	-	-	31.486	31.778	0.6360	3.8135	1.9070	6.3565	25.4220
3.	VESA 640*480	-	-	37.870	26.4131	0.7619	1.2698	4.0635	6.0952	20.3175
4.	SVGA 800*600	X	X	35.156	28.444	0.6667	2.0000	3.5556	6.2222	22.2222
5.	VESA 800*600	+	+	37.879	26.4	1.000	3.2	2.2	6.4	20
6.	VESA 800*600	+	+	46.875	21.333	0.323	1.616	3.232	5.172	16.162
7.	VESA 800*600	+	+	48.077	20.8000	1.1200	2.4000	1.2800	4.8000	16.0000
8.	8514A 1024*768	+	+	35.524	28.150	0.1782	3.9195	1.2471	5.3448	22.8045
9.	VESA 1024*768	-	-	48.363	20.6769	0.3692	2.0923	2.4615	4.9231	15.7539
10.	VESA 1024*768	-	-	56.476	17.7067	0.3200	1.8133	1.9200	4.0533	13.6533
11.	VESA 1024*768	+	+	60.023	16.667	0.21	1.219	2.235	3.664	13.003
12.	1280*1024	-	-	63.750	15.686	0.581	1.489	1.997	4.067	11.619

MODE	RESOLUTION	(HZ) VER-FREQUENCY	(MS) V-PERIOD	(MS) FRONT PORCH	(MS) SYNC WIDTH	(MS) BACK PORCH	(MS) BLK	(US) ACTIVE VIDEO	INTERLACED
1.	VGA 720*400	70.08	14.2685	0.3810	0.0636	1.1120	1.5566	12.711	NO
2.	VGA 640*480	59.94	16.6832	0.3180	0.0636	1.0490	1.4306	15.253	NO
3.	VESA 640*480	72.81	13.7346	0.2377	0.0792	0.7396	1.0565	12.6781	NO
4.	SVGA 800*600	56.25	17.7778	0.0284	0.0589	0.6258	0.7111	17.0667	NO
5.	VESA 800*600	60.317	16.579	0.026	0.106	0.607	0.739	15.84	NO
6.	VESA 800*600	75	13.333	0.448	0.064	0.448	0.533	12.9	NO
7.	VESA 800*600	72.19	13.8528	0.7696	0.1248	0.4784	1.3728	12.4800	NO
8.	8514A 1024*768	86.958	11.500	0.0141	0.1126	0.5630	0.69	10.81	YES
9.	VESA 1024*768	60.00	16.6658	0.0620	0.1241	0.5996	0.7859	15.8799	NO
10.	VESA 1024*768	70.07	14.2716	0.0531	0.1062	0.5135	0.6729	13.5987	NO
11.	VESA 1024*768	75.029	13.328	0.016	0.05	0.466	0.532	12.796	NO
12.	1280*1024	59.747	16.737	0.047	0.04	0.58	0.674	16.063	NO

4-5 USER TIMING MODE SETUP

The monitor is factory programmed with 12 timing modes (refer to Timing Table). The monitor is capable of storing 27 modes total, with 12 factory programmed this leaves 15 available spaces for the user.

The successfully install a new timing mode certain conditions must be met. The new mode must have a horizontal frequency difference of 1 KHz, minimum or a vertical frequency difference of 3 Hz, minimum from any single mode previously installed. For example:

Assuming the timing requirements are met the new mode is automatically installed when the monitor is connected to signal source. At this point the front panel controls for horizontal/vertical display size and position may be adjusted to the user's preference and these conditions will automatically be stored with the current timing mode.

Whenever the horizontal/vertical display size or position setup is changed, the latest setup will be stored with the timing mode in operation at the time of the change.

After 15 user modes are installed, when no.16 is installed, no.1 is removed and lost. The 12 factory installed modes are not affected.

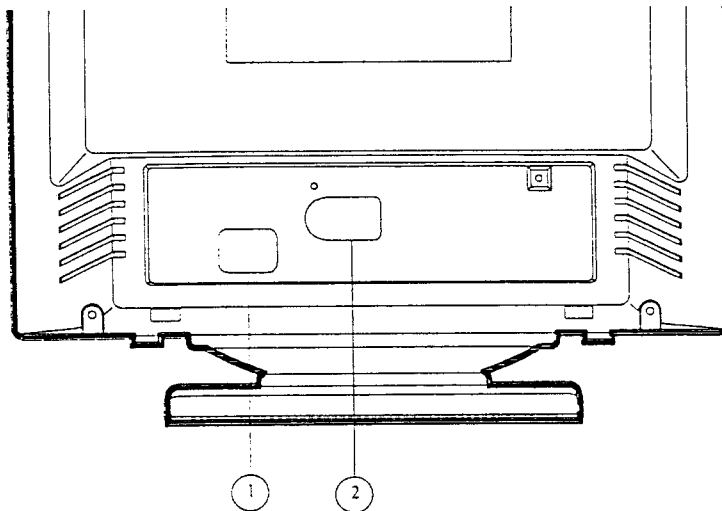
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5. OPERATION

5-1 OPERATION INSTRUCTIONS

Follow these step-by-step instructions for proper monitor installation.

1. Be sure that the power switch is in the "Off" position before plugging in the power cord and applying any AC power.



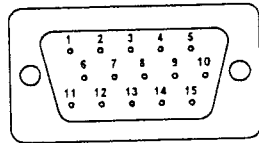
- ① AC SOCKET
- ② 15 PIN D-TYPE CONNECTOR

2. Plug the power cord into the inlet socket after Step(1) has been verified. The diagram shown above (rear view of exterior) shows the location of inlet socket (marked as ① in the diagram).
3. Connect the signal cable Connectors, to the computer controller and/or other signal source.
4. After the above steps have been performed, you may now press the power switch to the "ON" position.

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5-2 D-SUB CONNECTOR

D-SUB 15 PIN CONNECTOR



1 R	6 GND	11 GND
2 G	7 GND	12 SDA
3 B	8 GND	13 H.SYNC
4 GND	9 NC	14 V.SYNC
5 NC	10 GND	15 SCL

SIGNAL LEVEL

CONNECTOR	SIGNAL	DESCRIPTION
R	RED	0.7vp-p
G	GREEN	0.7vp-p(VIDEO)
B	BLUE	0.7vp-p
H/HV	H or H/V SYNC	TTL positive or negative
V	V/SYNC	TTL positive or negative
SDA	DDC1/2B	TTL negative
SCL	DDC1/2B	TTL negative

6. ADJUSTMENT

6-1 ADJUSTMENT CONDITIONS AND PRECAUTIONS

1. Approximately 30 minutes should be allowed for warm up before proceeding.
2. Adjustments should be undertaken only on those necessary elements since most of them have been carefully preset at the factory.

6-2 MAIN ADJUSTMENTS

NO.	FUNCTION	LOCATION	DESIGNATION
1	B+ 15V ADJ.		VR801
2	H-Free Running 56.47K		VR401
3	Raster Centering ADJ. (56K)		S401
4	White Balance of Raster		VR901, VR902, VR903
5	White Balance of Contrast		VR904, VR905
6	Focus ADJ.		Focus VR.
7	H/V Limit		VR802
8	SUB-Contrast ADJ.		VR404
9	ABL ADJ.		VR403
10	SUB-BRT ADJ.		VR406

6-3 EXTERNAL CONTROLLED FUNCTION

ITEM	DESCRIPTION
1 POWER SWITCH	-CONTROLS ON/OFF POWER TO MONITOR.
2 ON/OFF INDICATOR	-LED (WHEN LIT) GIVES VISUAL CONFIRMATION OF POWER ON.
3 CONTRAST	-ADJUSTS THE CHROMA CONTRAST (INTENSITY) OF THE PICTURE.
4 BRIGHTNESS	-ADJUSTS THE ILLUMINANCE OF THE PICTURE.
5 FUNCTION	-SELECT ITEM (H-CENTER, H-SIZE, V-CENTER, V-SIZE, PINCUSHION, KEYSTONE).
6 DEC(-)	-DECREASE DAC VALUE.
7 INC(+)	-INCREASE DAC VALUE.
8 LED4	-V-SIZE INDICATOR.
9 LED3	-V-CENTER INDICATOR.
10 LED2	-H-SIZE INDICATOR.
11 LED1	-H-CENTER INDICATOR.

6-4 ALIGNMENT PROCEDURES

Adjustment Conditions and Precautions:

- (1) Power supply voltage: AC 100~240V; 50/60 Hz.
- (2) Warm up time:
The display must be power ON for at least 20 minutes before starting alignments. This is especially critical in color temperature and white balance adjustments.
- (3) Signals: reference the front detail specifications and timing table.
Video : reference the front detail specifications.

1. Switching Regulator Unit:

- Conditions: (a) Set timing 56KHZ 1024x768
(b) USE cross-hatch pattern, EXT. BRI./EXT. CONT. VR be set to max.

adjust VR801 to get $15.1 \pm 0.1V$ voltage at the cathode of D814.

2. Anode Voltage Unit:

Conditions: the same as ITEM 1.

adjust VR802 to get H.V (a) $24.5 \pm 0.1KV$ for CPT & MATSUSHITA TUBE.
(b) $24.0 \pm 0.1KV$ for PHILIPS TUBE.

3. H-Free Running:

- Conditions: (a) Set 56.47KHZ/70HZ 1024x768 mode.
(b) USE cross-hatch pattern, EXT. BRI./EXT. CONT. VR be set to max.

- (1) Connect TP201 with one cap 22uF/25V to GROUND.
- (2) adjust VR401 till the image are clear and not slanting to left or right.
- (3) Disconnect cap 22uF/25V.

4. RASTER CENTERING:

Conditions: the same as ITEM 1.

Switch S401 till the raster in the spec.

5. Adjustment of White Balance

- Conditions: (a) Warm up time must be over 30 minute.
(b) Set 56KHZ 1024x768 2" square & raster pattern.
(c) degaussing one time.
(d) adjust H-SIZE $260 \pm 4mm$, V-SIZE $195 \pm 4mm$.

- (1) Make sure the VR901, VR902, VR903, VR904, VR905 are all in the middle position.
- (2) Put EXT. BRIT. VR to detent, EXT. CONT. VR to max and set raster pattern to adjust screen VR for raster lop about $0.08 \pm 0.01FL$.

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- (3) Enter 2" square patter and put EXT. BRIT. VR at detent, adjust EXT. CONT. VR for lop about 1.5FL. adjust VR902 VR903 to get $X=281\pm5$ $Y=311\pm5$.
- (4) Enter 2" square patter and put EXT. BRIT. VR at detent, EXT. CONT. VR at max. adjust VR904 VR905 to get $X=281\pm5$ $Y=311\pm5$.
- (5) Repeat ITEM (2), (3), (4) till $X=281\pm5$ $Y=311\pm5$.

6. Lop Adjustment:

Conditions: the same as ITEM 5.

- (1) Raster lop : enter raster pattern and put EXT. BRIT. VR at detent EXT. CONT. VR at max. adjust screen VR to get raster lop about $0.08\pm0.01FL$. make sure raster lop between 0.5 and 2.5FL when EXT. BRIT. VR adjust to max.
- (2) 2" square lop : enter 2" square pattern and put EXT. BRIT. VR at detent, EXT. CONT. VR at max. adjust VR404 to get lop about $41\pm2FL$.
- (3) Full white lop: enter full white pattern, adjust VR403 to get lop about $32\pm2FL$.

7. Focus Running:

- Conditions: (a) Set 36KHZ 1024x768 and EXT. BRIT. VR at detent. EXT. CONT. VR at max.
- (b) Use text mode pattern especially "@" character.

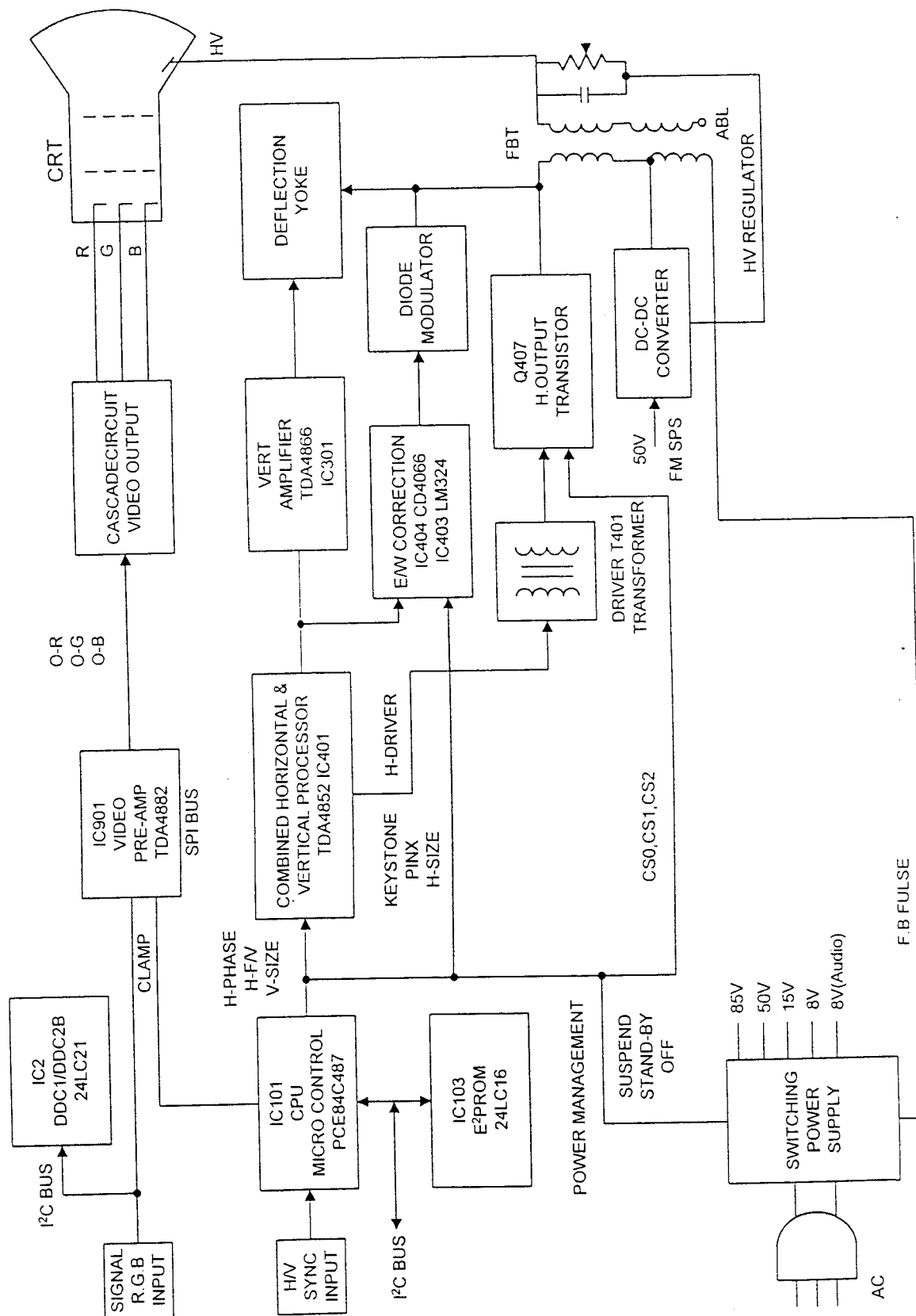
8. Display performance and geometric adjustment:

Conditions:

- (1) equipment: a. 80486 PC. with printer port.
b. I²C cable.
- (2) File : MAS.EXE (Main program).
product file
system file
- (3) Main menu: Press F12 Adjust geometry

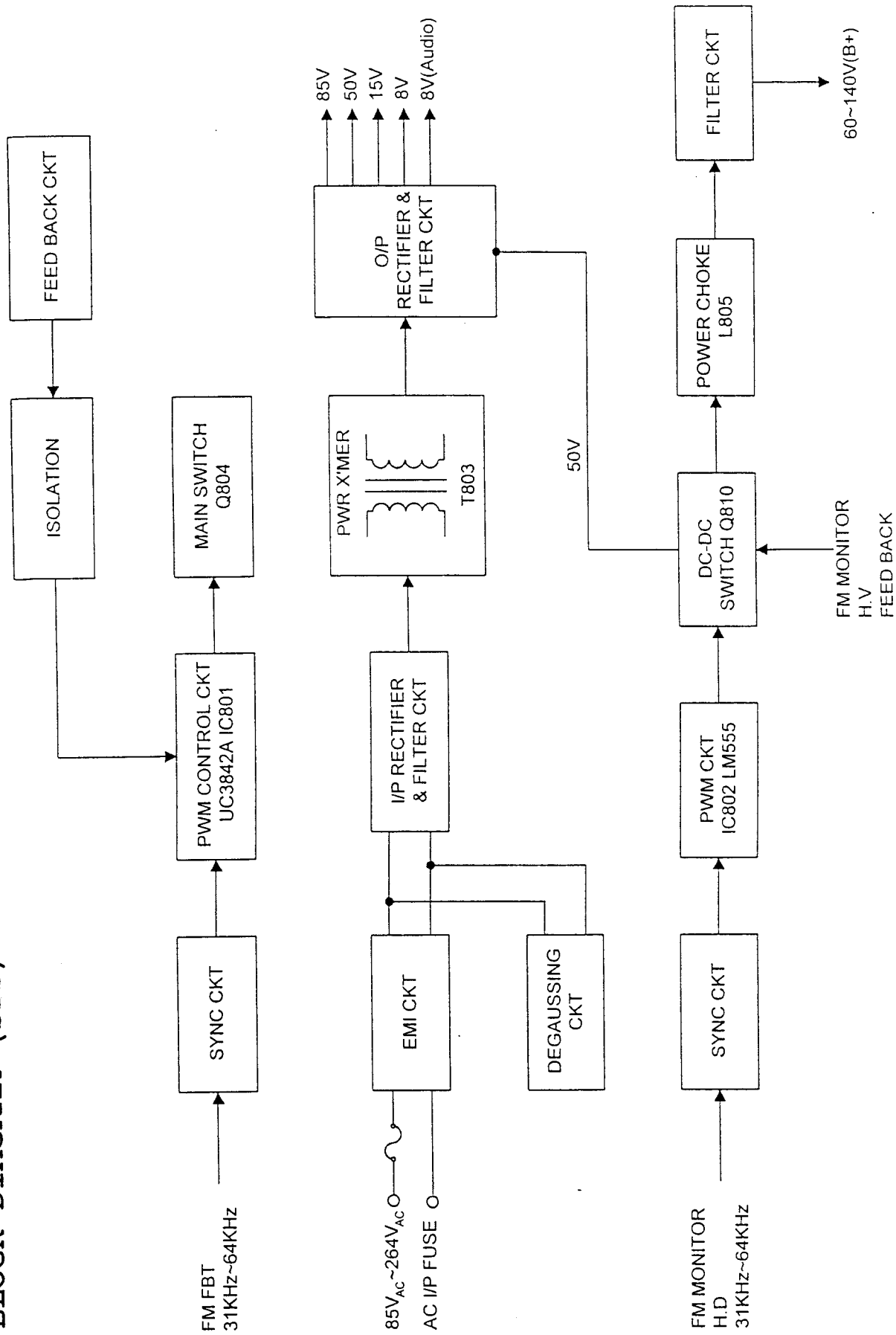
KEY			select item
			Increase, Decrease DAC value by one step
			Big step INC, DEC DAC value
			Abort
			OK

7. BLOCK DIAGRAM (VIDEO, VERT&HORI)



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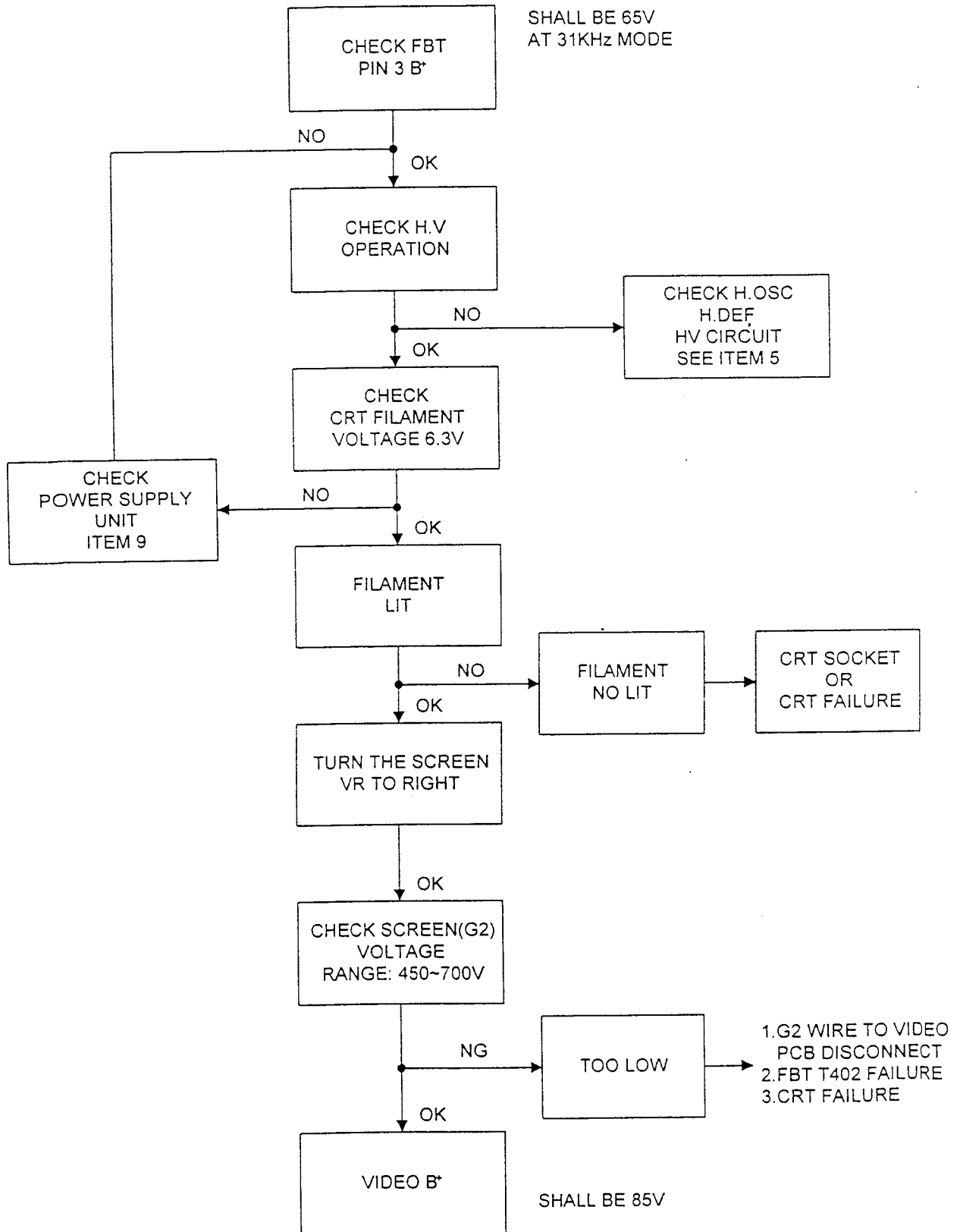
7. BLOCK DIAGRAM (SPS)



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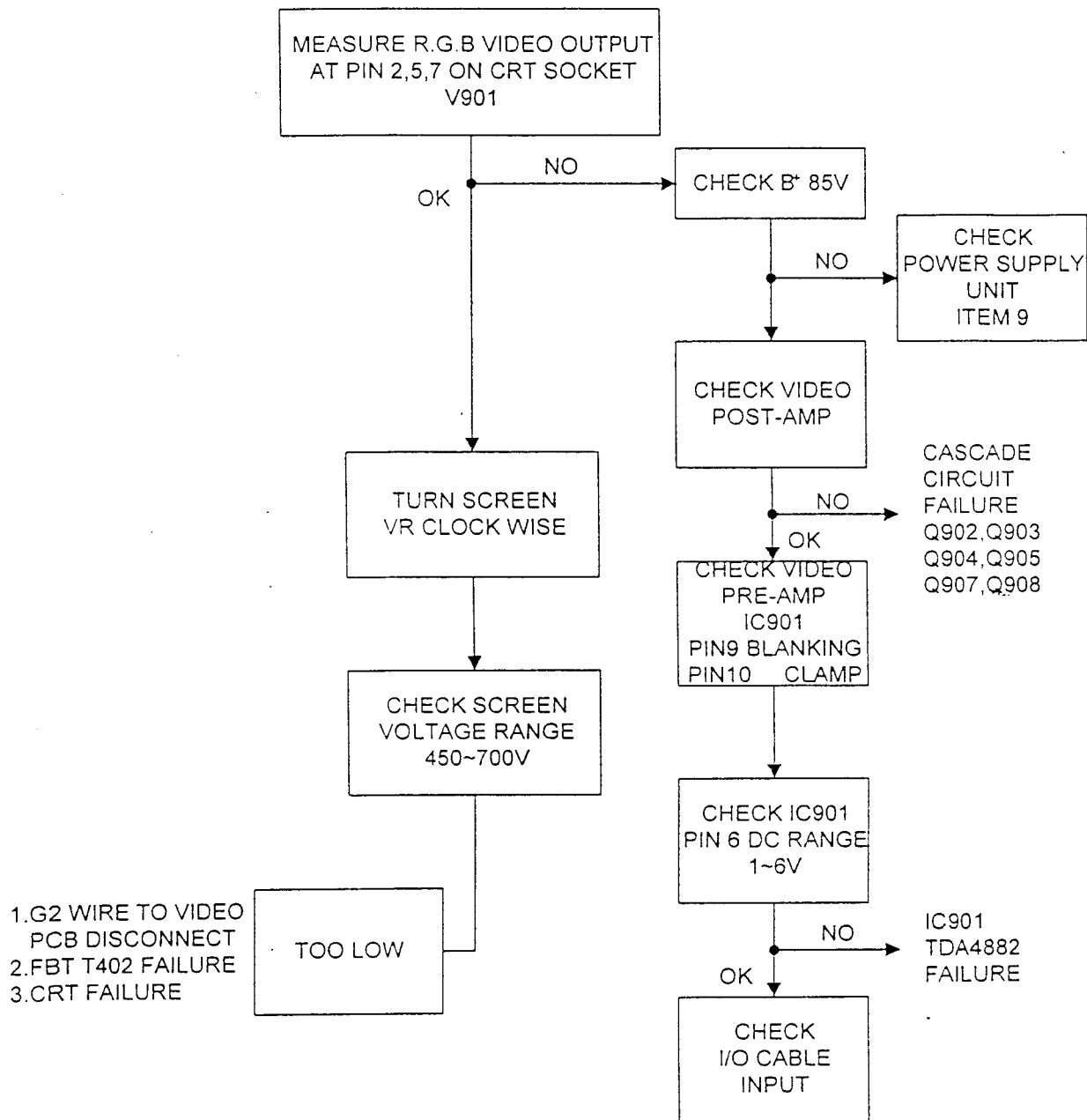
8. TROUBLE SHOOTING FLOW CHART

8-1. NO RASTER

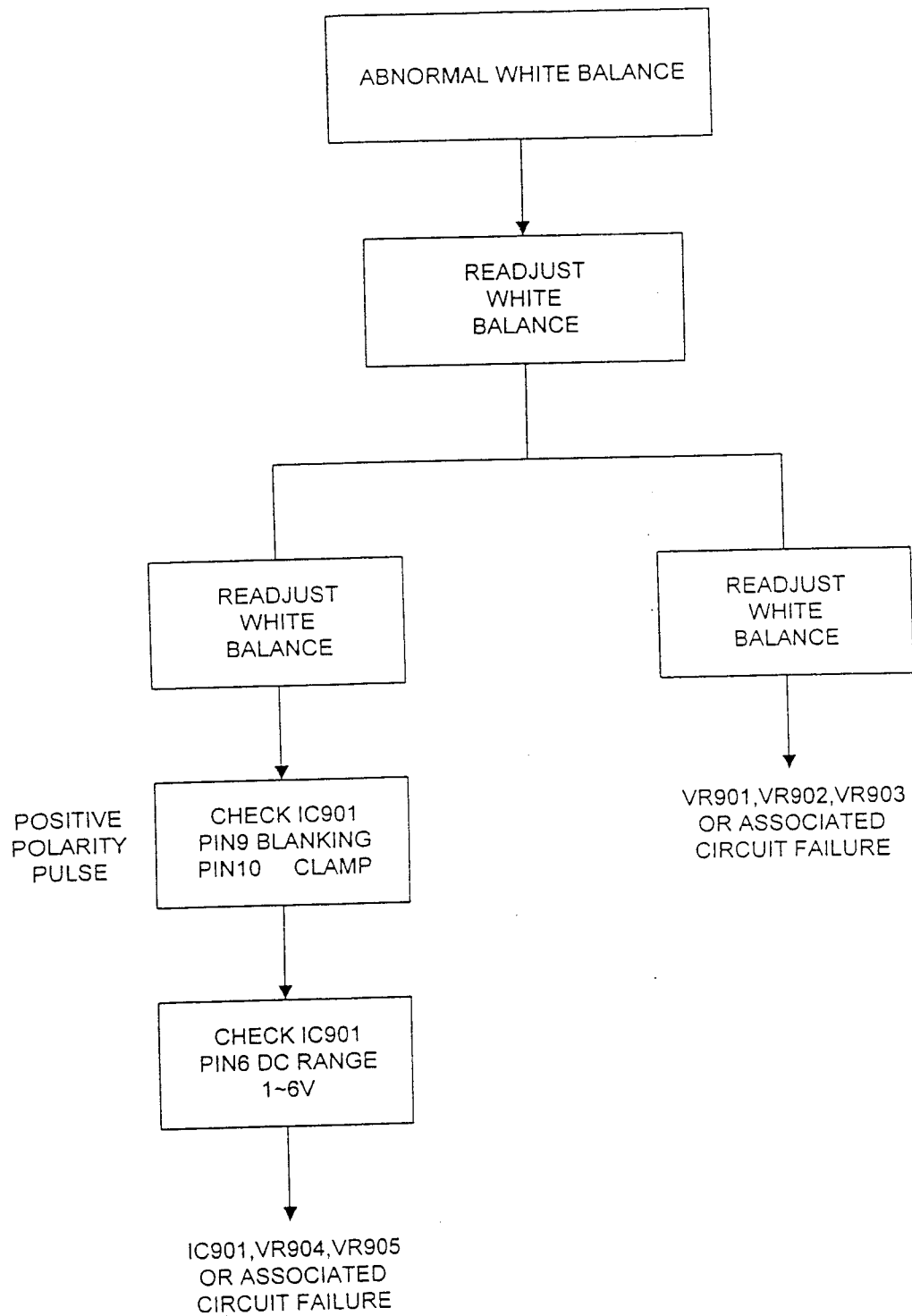


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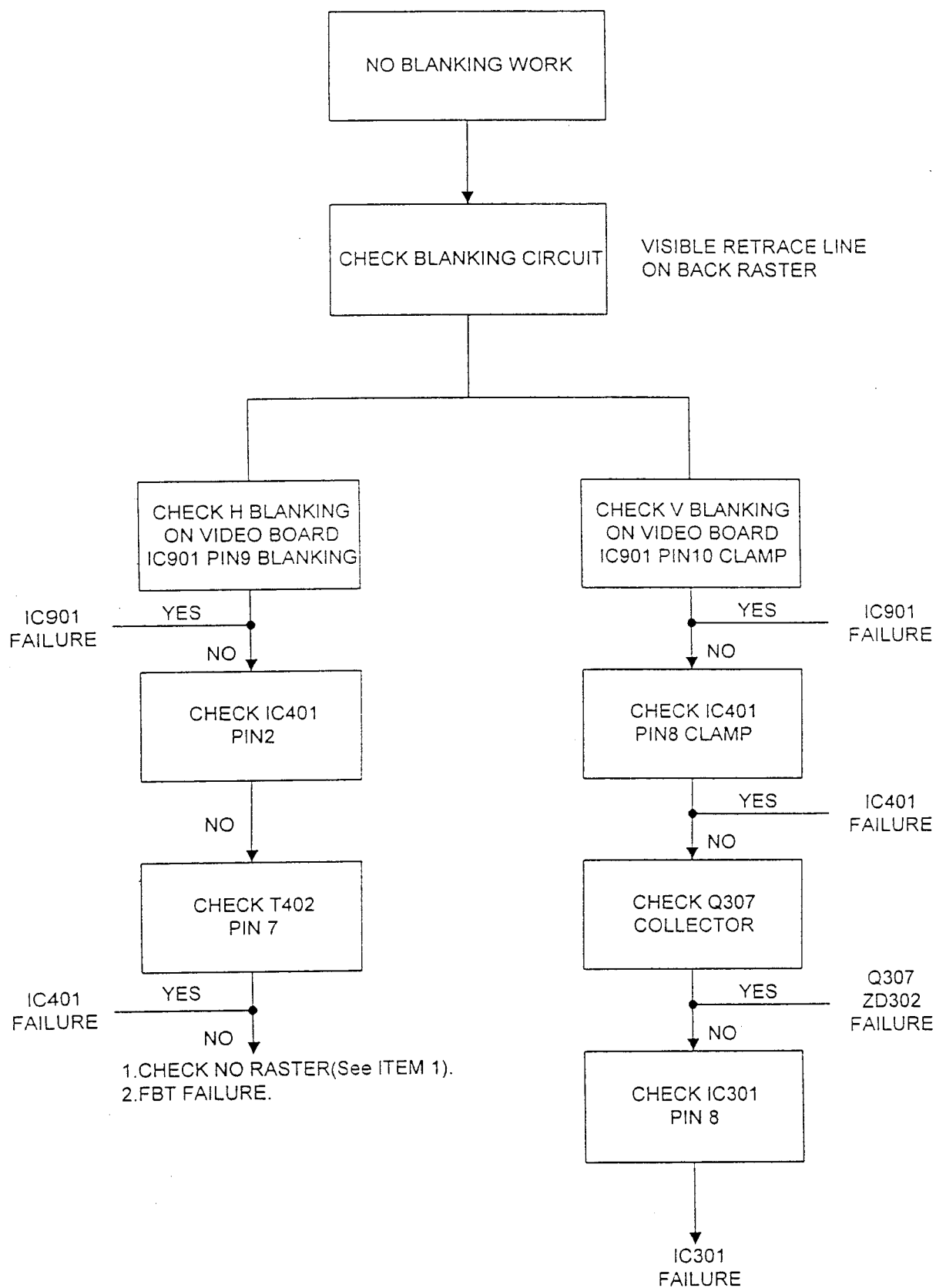
8-2. ABNORMAL VIDEO ON CRT SCREEN



8-3. ABNORMAL WHITE BALANCE

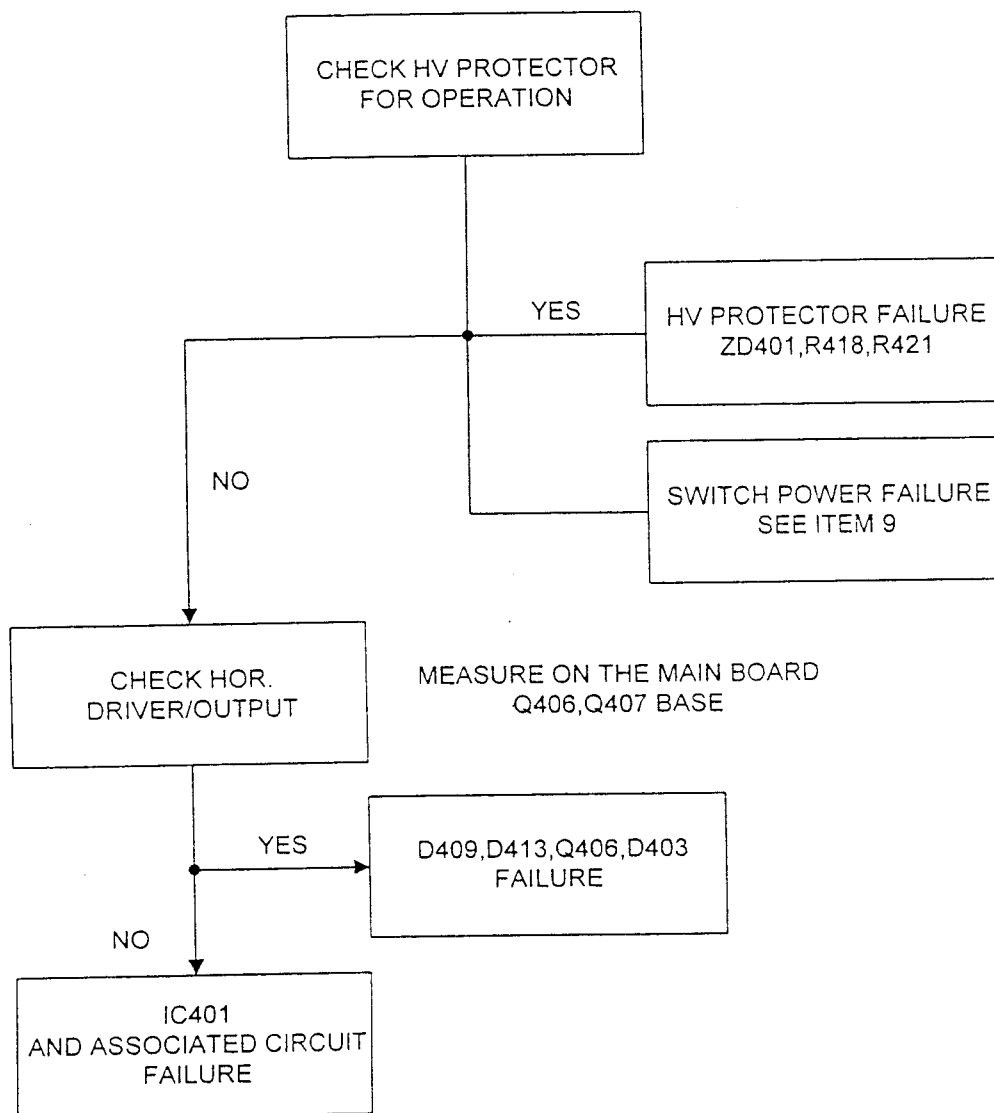


8-4. NO BLANKING

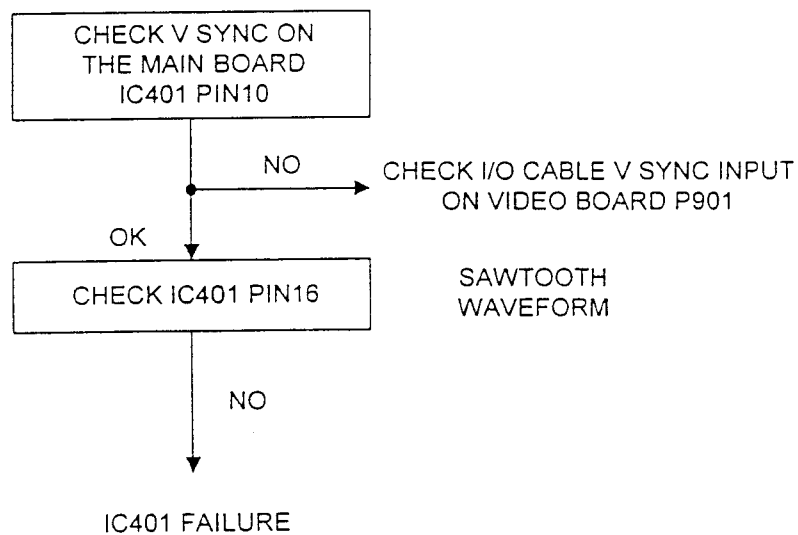
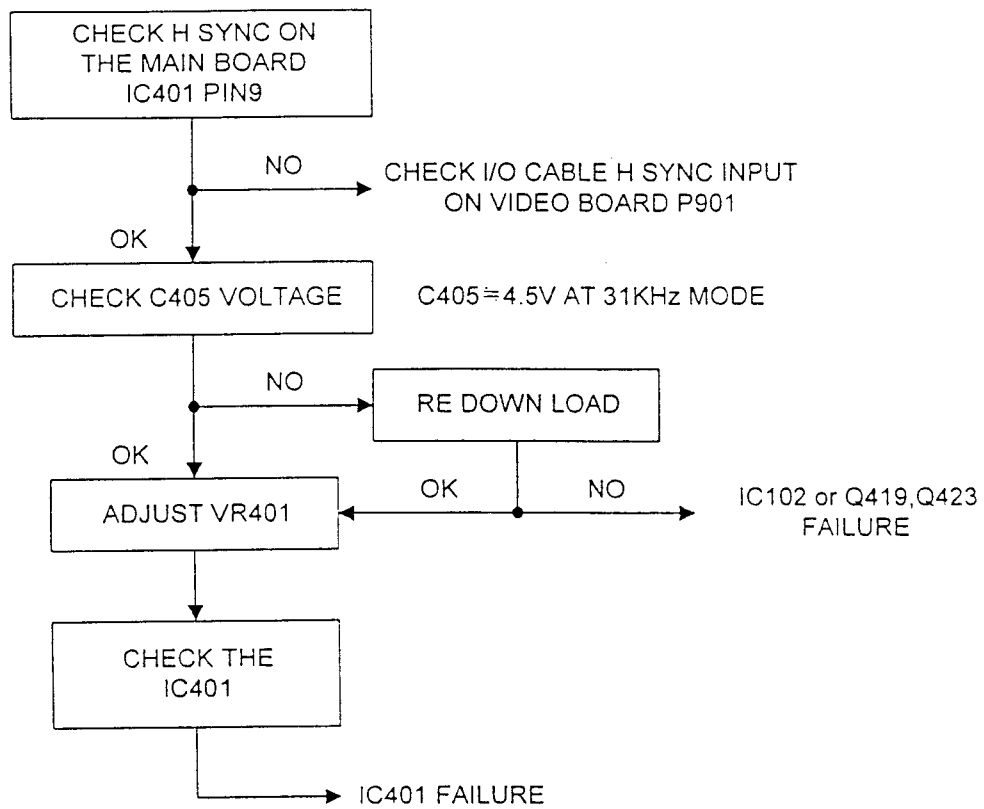


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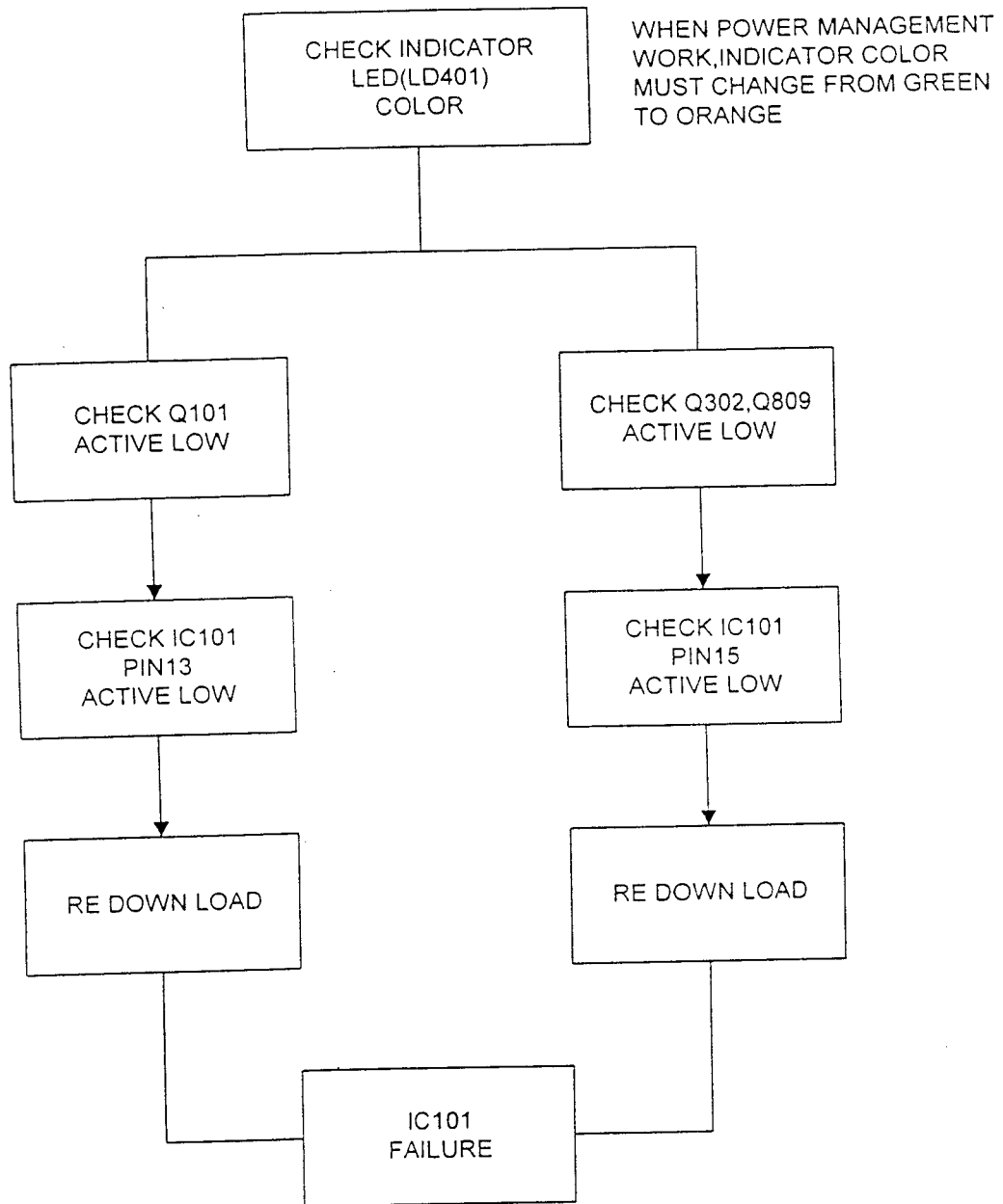
8-5. H.OSC/DEF/HV CIRCUIT FAULT



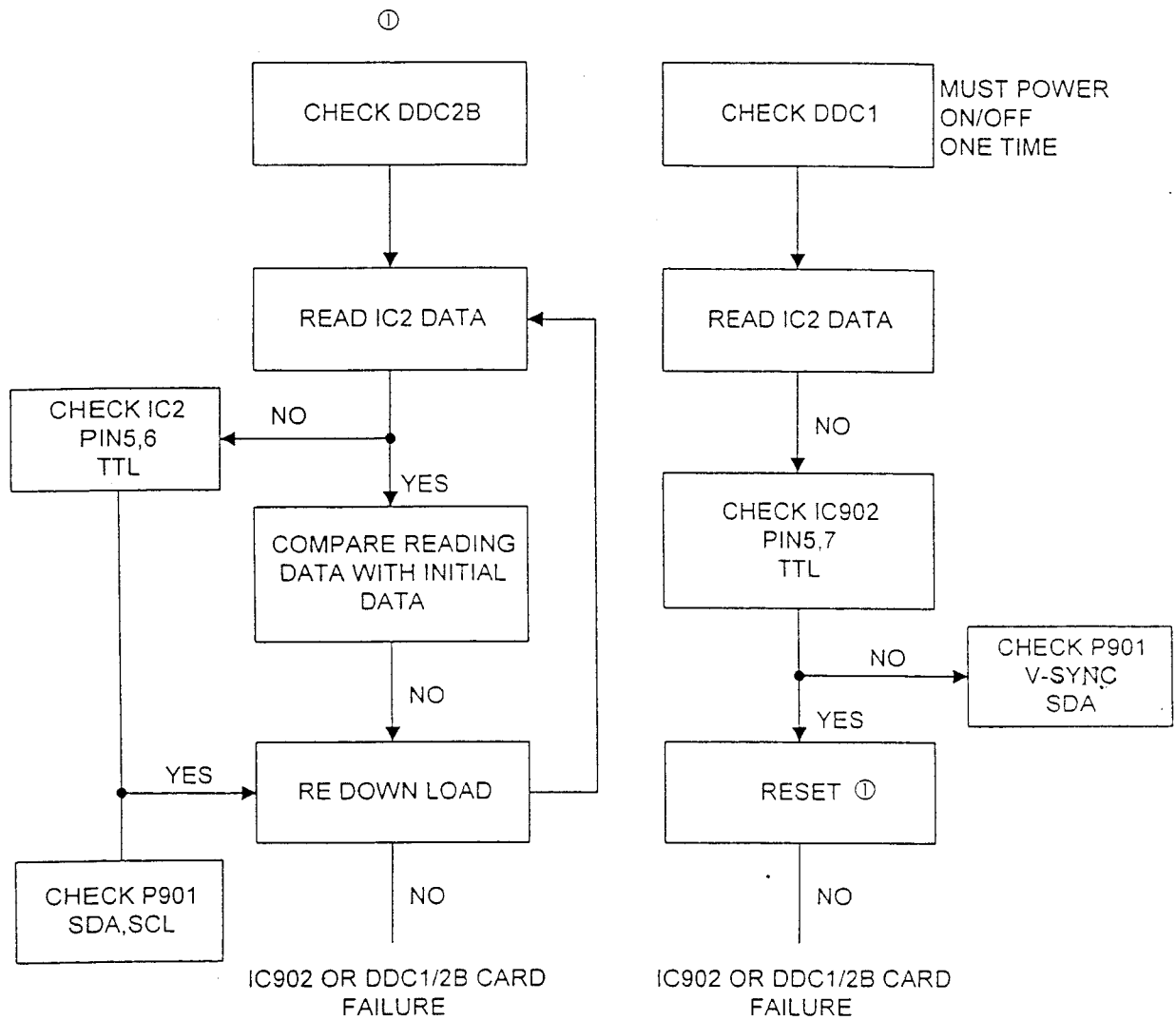
8-6. F/V CONVERTER AND UNSTABLE SYNCHRONIZATION



8-7. NO POWER MANAGEMENT FUNCTION

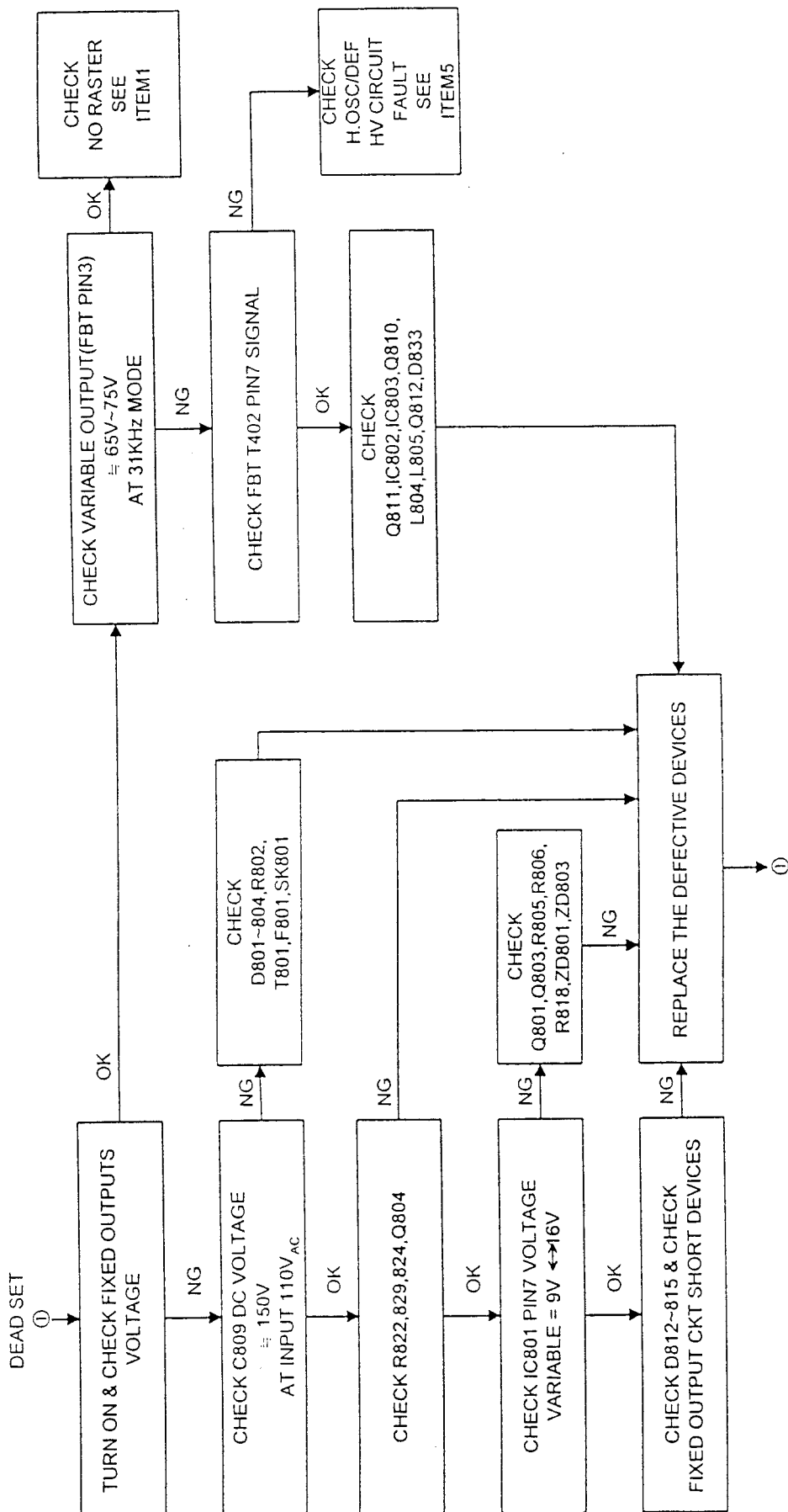


8-8. NO DDC1/DDC2B



8-9. POWER SUPPLY TROUBLE SHOOTING CHART

POWER SUPPLY OUTPUT (A) VARIABLE OUTPUT : 65~150V(DEPENDING UPON H-SYNC FREQUENCY)
(B) FIXED OUTPUT : 5V,8V,15V,48V

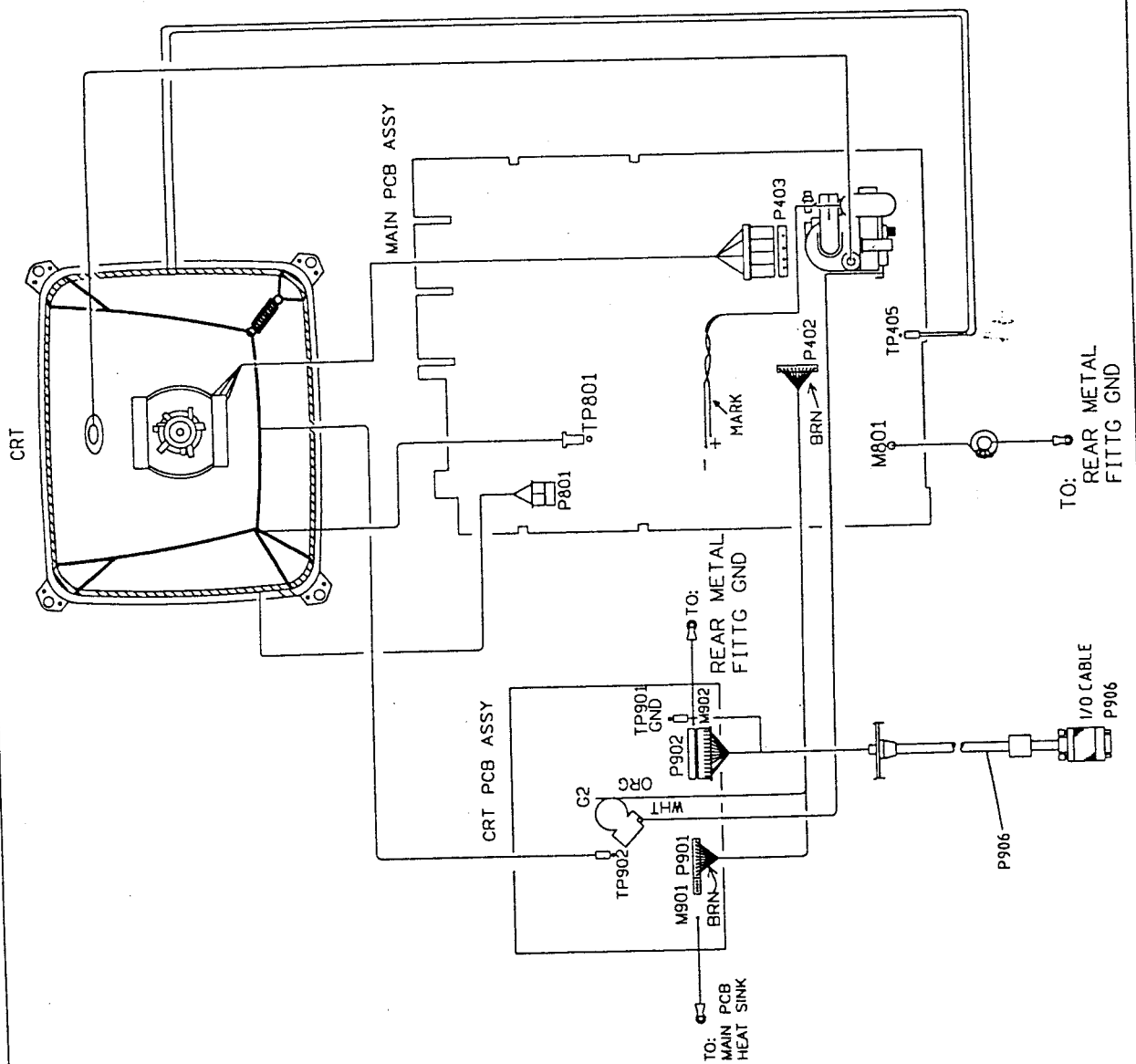


9-2 EXPLODED PARTS LIST

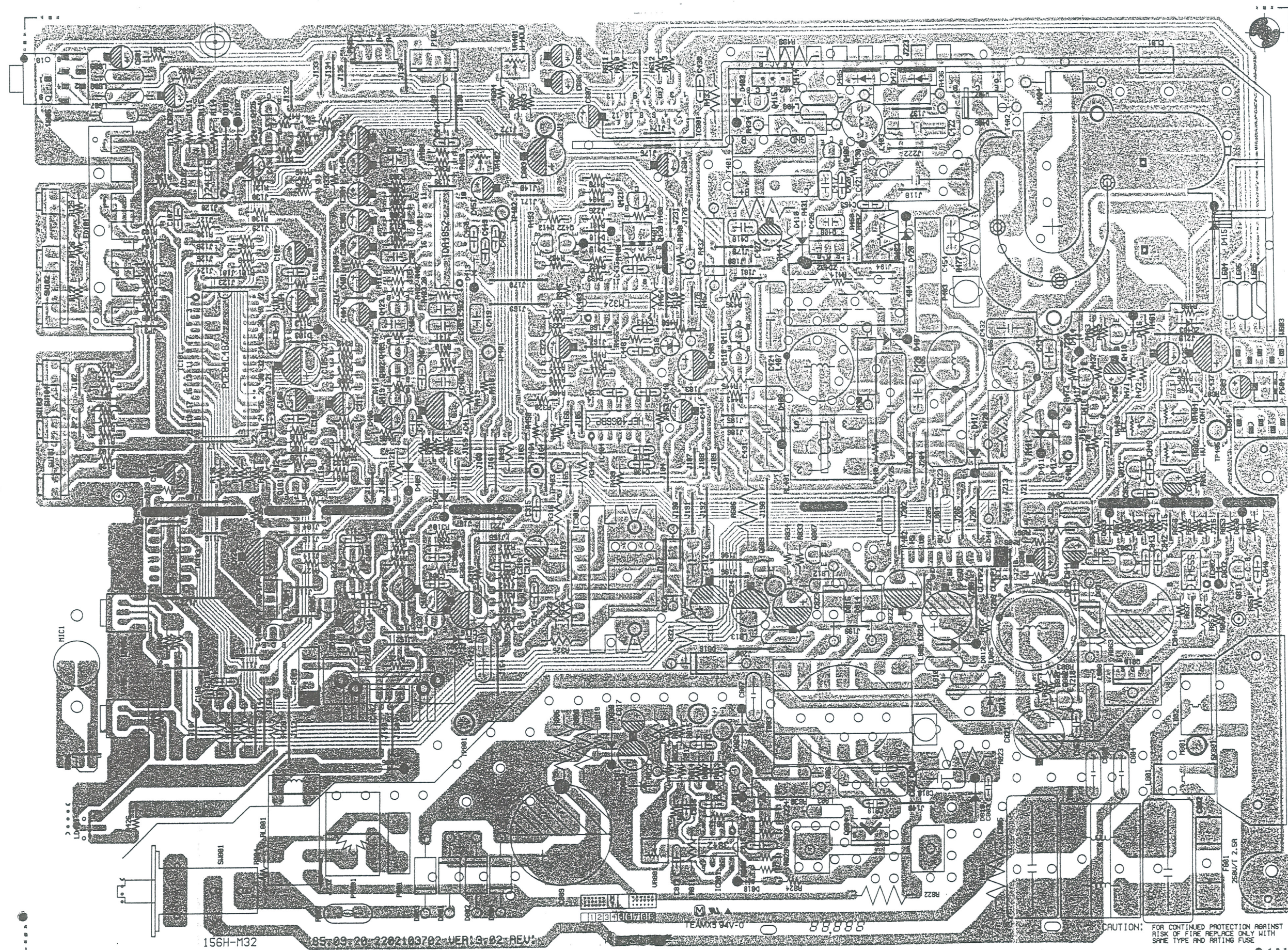
Ref. No.	PART No.	DESCRIPTION	* SPEC.	Q'TY	REMARK
132	2024250601	PANEL	ABS 94V0	1	
133	2044250501	KNOB	ABS 94V0	1	
134	2053250701	INDICATOR	PMMA	1	
135	2046250201	PUSH BUTTON	ABS 94V0	1	
136	2105150100	SPRING	φ 0.45	1	
137	2048250101	BUTTON BASE	ABS 94V0	1	
138	2053250300	INDICATOR	PMMA	1	
144	2084730102	SCREW,BND T+	M3x10	2	
145	2084740102	SCREW,BND T+	M4x10	1	
146	2084730102	SCREW,BND T+	M3x10	1	
147	2080200400	SCREW,SPE T+	SWCH 18A MFZN II -C	4	
148	2061400100	BUSHING		4	
149	2090105042	WASHER,METAL	20x5.5d 1.0t	4	
151	2022250501	CABI BACK	ABS 94V0	1	
152	2084740202	SCREW,BND T+	M4x20	2	
153	2084730102	SCREW,BND T+	M3x10	1	
154	2084730102	SCREW,BND T+	M3x10	1	
155	2054150201	ORNAMENT	PVC 0.5T 5.0+46.5	1	
162	2028250501	STAND	HIPS 94HB	1	
163	2074107000	HOLDER	DURACON M90	1	
164	2039801701	LEG	SBR φ 11.8x5T BLACK	4	
165	2084740202	SCREW,BND T+	M4x20	1	
166	2108250101	SWIVEL	HIPS 94HB	1	
175	2074150700	HOLDER	NYLON 66	2	
178	2043250201	ROTARY KNOB	ABS 94V0	2	
182	2071951000	METAL FITTG	SECC T=1.0	1	
184	2092440200	WASHER,OT	D=4.3 D2=8.5 T=0.45	2	
185	2082640102	SCREW	M4x10 P=0.7	2	
187	2084730102	SCREW,BND T+	M3x10	2	
192	2063350200	PROTECTOR	SPTE T=0.45	1	
193	2074191000	HOLDER		2	
196	2105201200	SPRING PLATE	T0.3	1	
197	2072213000	HEAT SINK		1	
198	2072214200	HEAT SINK	ALUMINUM	1	
199	2072209700	HEAT SINK		1	
200	2072251700	HEAT SINK	ALUMINIUM A1100P	1	
201	2072251300	HEAT SINK	A6063S-T5	1	
202	2072209000	HEAT SINK	6063S-T5	1	
203	2072400700	INSULATOR	SILICON	1	
204	2074150600	HOLDER	NYLON 66	1	
205	2074151200	HOLDER	NYLON 66	1	
206	2063202800	SPACER SUPPORT	NYLON 94-V0	1	
207	2082730102	SCREW,BND +	M3x10	1	
208	2084730102	SCREW,BND T+	M3x10	2	
209	2084740102	SCREW,BND T+	M4x10	1	
210	2084730102	SCREW,BND T+	M3x10	1	
211	2094600400	NET,HEX	D1=3.0 CLASS2 SWRM-3 ZMC2-C	1	
212	2084730102	SCREW,BND T+	M3x10	1	
213	2084730102	SCREW,BND T+	M3x10	2	
214	2084730102	SCREW,BND T+	M3x10	1	
215	2071650700	SHIELD PLATE	SPTE T=0.3	1	
216	2061201000	SPONGE	W=30 L=50 T=25 UL	1	
218	2072251800	HEAT SINK	ALUMINIUM A6063S-T5	1	
219	2084730102	SCREW,BND T+	M3x10	3	

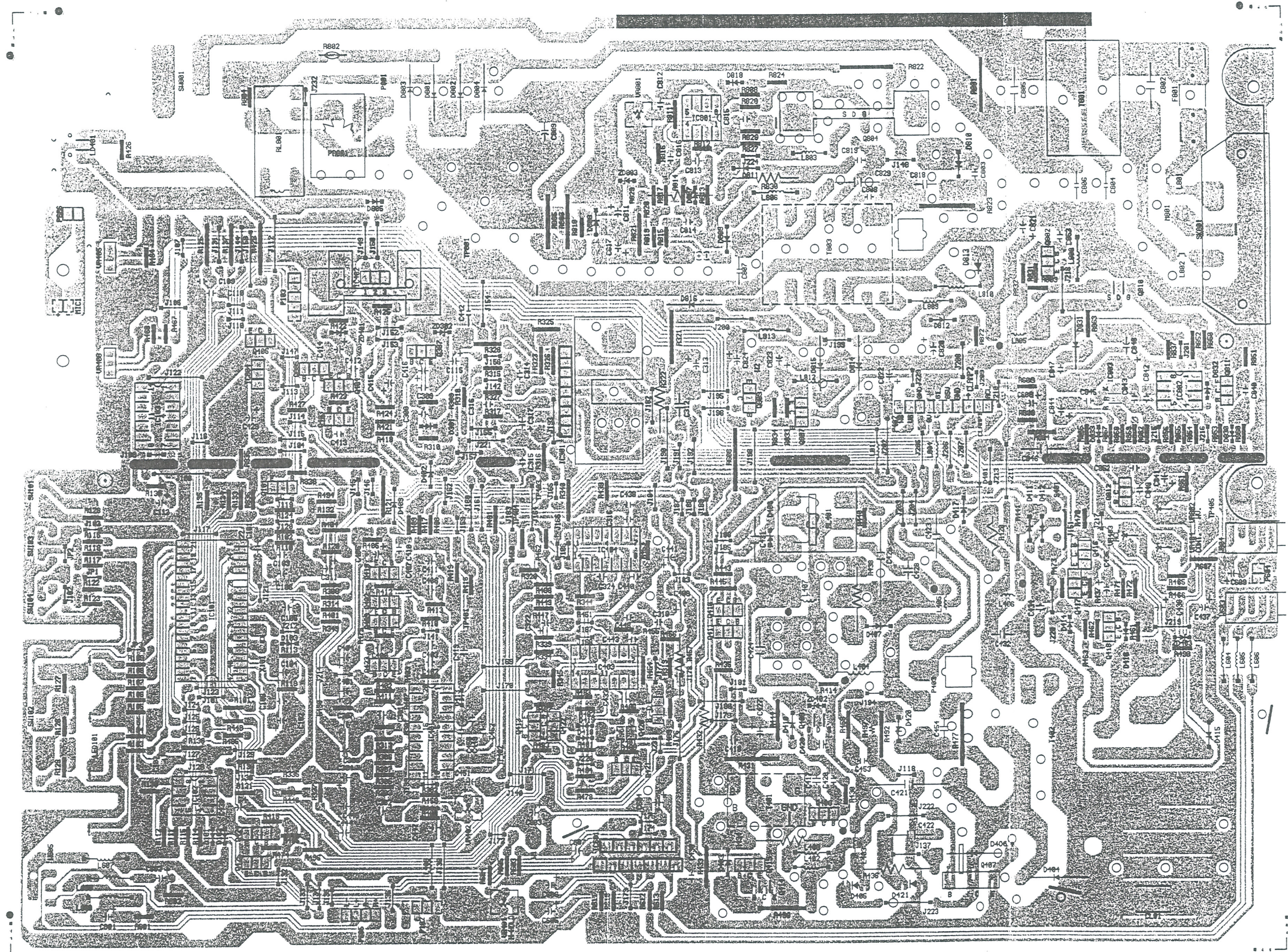
OPTIQUEST - Q53

10. WIRING DIAGRAM



OPTIQUEST - Q53



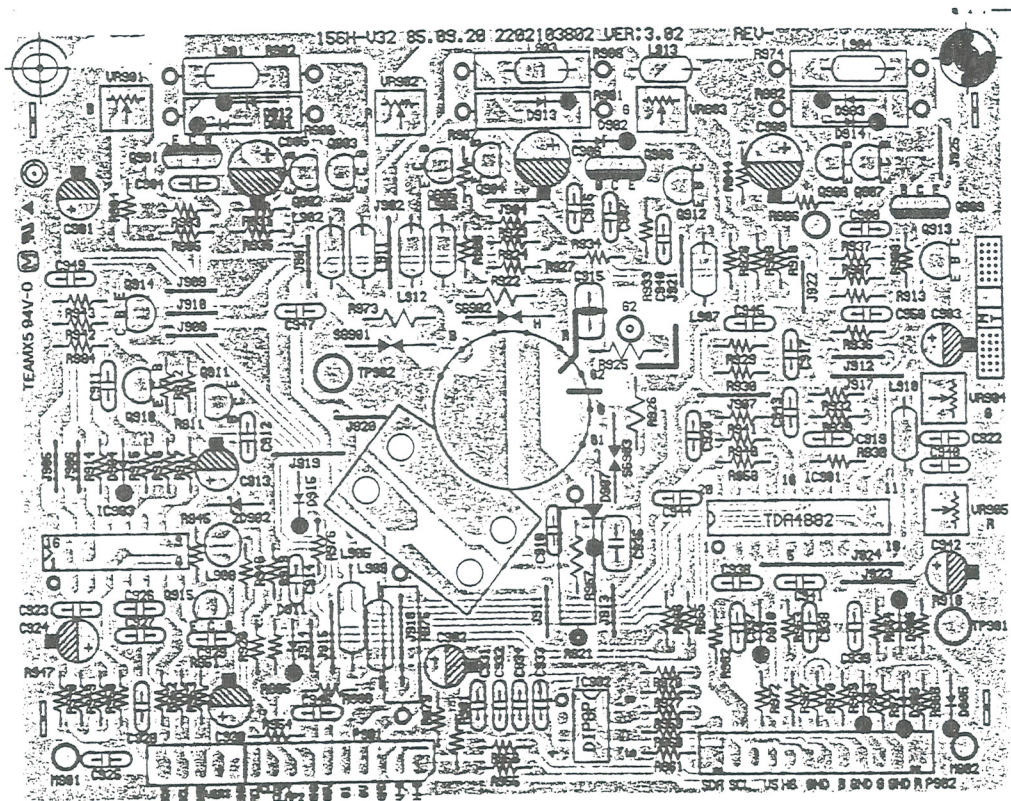


11-2 CRT PCB

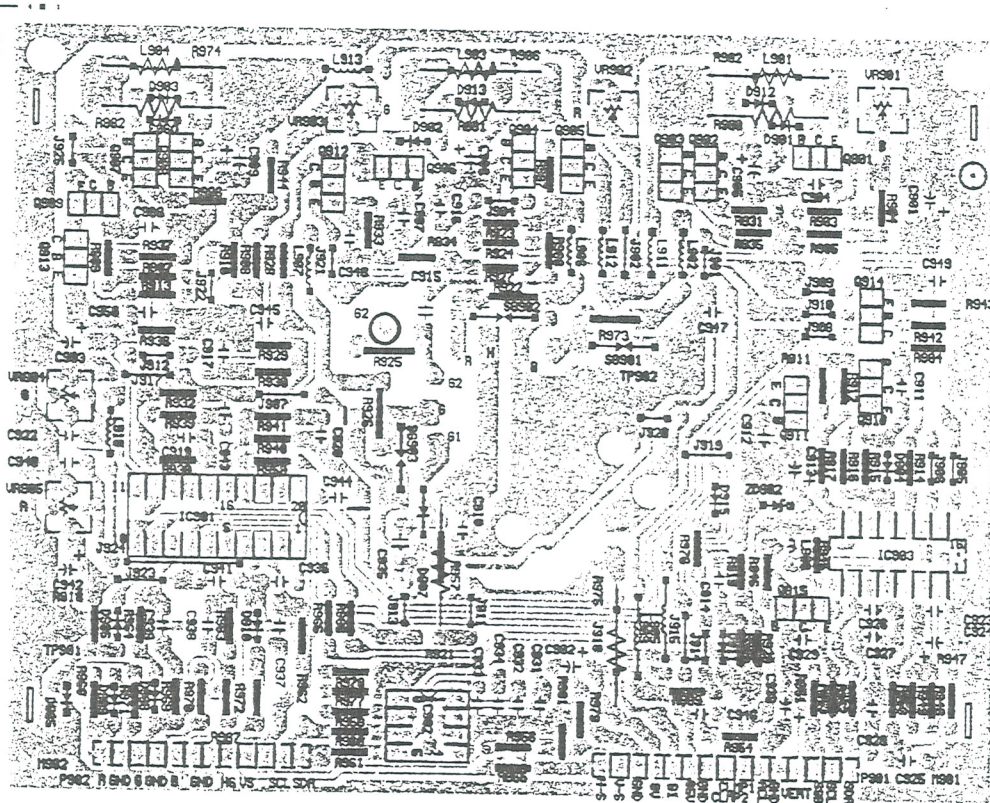
CRT PCB TOP VIEW

OPTIQUEST - Q53

Model VCDTS21359-1



Model VCDTS21359-1



12. ELECTRICAL PARTS LIST

OPTIQUEST - Q53

When you place a parts order, be sure to indicate the following data on the order:

- Location No.
- Parts No.
- Description

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.	REMARK
MAIN P.C.BOARD					
C101		2272110191	CAP,CER	100.000PF 50V	J
C102		2331610591	CAP,MINI ELE	1.000UF 50V	M
C103		2291527291	CAP,MYL	2700.000PF 100V	K
C104		2331610691	CAP,MINI ELE	10.000UF 50V	M
C105		2331310812	CAP,MINI ELE	1000.000UF 16V	M
C106		2331422791	CAP,MINI ELE	220.000UF 25V	M
C107		2291527291	CAP,MYL	2700.000PF 100V	K
C108		2272115191	CAP,CER	150.000PF 50V	J
C109		2281110291	CAP,CER	1000.000PF 50V	K
C110		2272110191	CAP,CER	100.000PF 50V	J
C115		2331310812	CAP,MINI ELE	1000.000UF 16V	M
C301		2301310491	CAP,MTL	0.100UF 63V	J
C302		2301322491	CAP,MTL	0.220UF 63V	J
C304		2331647591	CAP,MINI ELE	4.700UF 50V	M
C306		2331610591	CAP,MINI ELE	1.000UF 50V	M
C307		2331647591	CAP,MINI ELE	4.700UF 50V	M
C308		2272110191	CAP,CER	100.000PF 50V	J
C309		2291522391	CAP,MYL	0.022UF 100V	K
C310		2272122191	CAP,CER	220.000PF 50V	J
C311		2331610691	CAP,MINI ELE	10.000UF 50V	M
C312		2302233412	CAP,MTL	0.330UF 100V	K
C313		2331847612	CAP,MINI ELE	47.000UF 100V	M
C314		2291533391	CAP,MYL	0.033UF 100V	K
C315		2272127191	CAP,CER	270.000PF 50V	J
C316		2272127191	CAP,CER	270.000PF 50V	J
C317		2331410791	CAP,MINI ELE	100.000UF 25V	M
C318		2321610591	CAP,ELE NP	1.000UF 50V	M
C322		2331647491	CAP,MINI ELE	0.470UF 50V	M
C324		2301322491	CAP,MTL	0.220UF 63V	J
C401		2331647591	CAP,MINI ELE	4.700UF 50V	M
C402		2291512391	CAP,MYL	0.012UF 100V	K
C403		2295210391	CAP,PPP	0.010UF 100V	G
C404		2331647591	CAP,MINI ELE	4.700UF 50V	M
C405		2331647591	CAP,MINI ELE	4.700UF 50V	M
C406		2291547391	CAP,MYL	0.047UF 100V	K
C407		2291515291	CAP,MYL	1500.000PF 100V	K
C408		2291547391	CAP,MYL	0.047UF 100V	K
C409		2331422791	CAP,MINI ELE	220.000UF 25V	M
C411		2331410812	CAP,MINI ELE	1000.000UF 25V	M
C412		2281410491	CAP,CER	0.100UF 50V	Z
C413		2281410491	CAP,CER	0.100UF 50V	Z
C414		2331410791	CAP,MINI ELE	100.000UF 25V	M
C415		2331410791	CAP,MINI ELE	100.000UF 25V	M
C416		2331610691	CAP,MINI ELE	10.000UF 50V	M
C417		2291533291	CAP,MYL	3300.000PF 100V	K
C418		2302147491	CAP,MTL	0.470UF 100V	J
C419		2291510491	CAP,MYL	0.100UF 100V	K
C420		2291510391	CAP,MYL	0.010UF 100V	K
C421		2298856212	CAP,PPP	5600.000PF 2000V	J
C422		2296651212	CAP,PPP	5100.000PF 630V	J
C423		2311136412	CAP,MTL	0.360UF 400V	J
C424		2307327412	CAP,MTL	0.270UF 250V	J
C425		2307382412	CAP,MTL	0.820UF 250V	J
C426		2291510491	CAP,MYL	0.100UF 100V	K
C427		2331610591	CAP,MINI ELE	1.000UF 50V	M
C428		2303210312	CAP,MTL	0.010UF 250V	K
C429		2331433791	CAP,MINI ELE	330.000UF 25V	M
C430		2285147191	CAP,CER	470.000PF 1KV	K
C431		2307122512	CAP,MTL	2.200UF 100V	J
C432		2303210312	CAP,MTL	0.010UF 250V	K
C433		2291527391	CAP,MYL	0.027UF 100V	K

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.	REMARK
C434		2291510491	CAP,MYL	0.100UF 100V	K
C435		2331447691	CAP,MINI ELE	47.000UF 25V	M
C436		2331622591	CAP,MINI ELE	2.200UF 50V	M
C437		2332110612	CAP,MINI ELE	10.000UF 250V	M
C438		2272122191	CAP,CER	220.000PF 50V	J
C439		2331647591	CAP,MINI ELE	4.700UF 50V	M
C440		2295222291	CAP,PPP	2200.000PF 100V	G
C441		2331422691	CAP,MINI ELE	22.000UF 25V	M
C442		2303210412	CAP,MTL	0.100UF 250V	K
C443		2291510391	CAP,MYL	0.010UF 100V	K
C444		2331647591	CAP,MINI ELE	4.700UF 50V	M
C445		2331647591	CAP,MINI ELE	4.700UF 50V	M
C448		2291510291	CAP,MYL	1000.000PF 100V	K
C451		2331610691	CAP,MINI ELE	10.000UF 50V	M
C453		2285168191	CAP,CER	680.000PF 1KV	K
C454		2307433212	CAP,MTL	3300.000PF 400V	J
C802		2300210401	CAP,MTL	0.100UF 250V	K
C804		2287247212	CAP,CER	4700.000PF 250VAC	M
C805		2300210401	CAP,MTL	0.100UF 250V	K
C806		2287247212	CAP,CER	4700.000PF 250VAC	M
C807		2287247212	CAP,CER	4700.000PF 250VAC	M
C809		2352522714	CAP,ELE	220.000UF 400V	M
C811		2331410791	CAP,MINI ELE	100.000UF 25V	M
C812		2281410491	CAP,CER	0.100UF 50V	Z
C813		2291510391	CAP,MYL	0.010UF 100V	K
C814		2291510391	CAP,MYL	0.010UF 100V	K
C815		2272110191	CAP,CER	100.000PF 50V	J
C816		2291510291	CAP,MYL	1000.000PF 100V	K
C817		2331410791	CAP,MINI ELE	100.000UF 25V	M
C818		2303210412	CAP,MTL	0.100UF 250V	K
C819		2285147191	CAP,CER	470.000PF 1KV	K
C820		2331947612	CAP,MINI ELE	47.000UF 160V	M
C821		2331822712	CAP,MINI ELE	220.000UF 100V	M
C822		2331410812	CAP,MINI ELE	1000.000UF 25V	M
C823		2333410812	CAP,MINI ELE	1000.000UF 25V	M
C829		2304210412	CAP,MTL	0.100UF 400V	K
C840		2281110291	CAP,CER	1000.000PF 50V	K
C841		2331410691	CAP,MINI ELE	10.000UF 25V	M
C842		2291510291	CAP,MYL	1000.000PF 100V	K
C843		2291510391	CAP,MYL	0.010UF 100V	K
C844		2331447691	CAP,MINI ELE	47.000UF 25V	M
C846		2303210412	CAP,MTL	0.100UF 250V	K
C847		2285110191	CAP,CER	100.000PF 1KV	K
C848		2332110712	CAP,MINI ELE	100.000UF 250V	M
C849		2291510391	CAP,MYL	0.010UF 100V	K
C852		2291510391	CAP,MYL	0.010UF 100V	K
D101		2363600195	DIODE,SWITCH	1N4148	
D102		2363600195	DIODE,SWITCH	1N4148	
D103		2363600195	DIODE,SWITCH	1N4148	
D301		2363600195	DIODE,SWITCH	1N4148	
D401	RA	2363212900	DIODE,RECT	BYM36C	PHILIPS
D401	RB	2363214812	DIODE,RECT	31DF6	IR
D402		2363600195	DIODE,SWITCH	1N4148	
D403		2363215695	DIODE,RECT	11DQ06	IR
D404		2363216500	DIODE,RECT	3TH41	TOSHIBA
D405		2363217400	DIODE,RECT	BY329X-1200	PHILIPS
D406		2363214812	DIODE,RECT	31DF6	IR
D407	RA	2363218295	DIODE,RECT	BYD33G	PHILIPS
D407	RB	2363206595	DIODE,RECT	RGP10G	FAGOR
D408		2363600195	DIODE,SWITCH	1N4148	
D409		2363600195	DIODE,SWITCH	1N4148	
D410	RA	2363218495	DIODE,RECT	BYD33J	PHILIPS
D410	RB	2363215095	DIODE,RECT	RGP10J	FAGOR
D412	RA	2363218495	DIODE,RECT	BYD33J	PHILIPS
D412	RB	2363215095	DIODE,RECT	RGP10J	FAGOR
D413		2363600195	DIODE,SWITCH	1N4148	
D414		2363600195	DIODE,SWITCH	1N4148	
D415	RA	2363218495	DIODE,RECT	BYD33J	PHILIPS
D415	RB	2363215095	DIODE,RECT	RGP10J	FAGOR
D416		2363600195	DIODE,SWITCH	1N4148	
D417	RA	2363200295	DIODE,RECT	BYD33M	PHILIPS

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.	REMARK
D417	RB	2363206695	DIODE,RECT	RGP10M	
D420		2363215195	DIODE,RECT	RGP02-18E	GI
D801	RA	2363216895	DIODE,RECT	1N5406	TSC
D801	RB	2363217595	DIODE,RECT	20D8	IR
D802	RA	2363216895	DIODE,RECT	1N5406	TSC
D802	RB	2363217595	DIODE,RECT	20D8	IR
D803	RA	2363216895	DIODE,RECT	1N5406	TSC
D803	RB	2363217595	DIODE,RECT	20D8	IR
D804	RA	2363216895	DIODE,RECT	1N5406	TSC
D804	RB	2363217595	DIODE,RECT	20D8	IR
D807		2363600195	DIODE,SWITCH	1N4148	
D808		2363600195	DIODE,SWITCH	1N4148	
D809		2363215495	DIODE,RECT	BYV26C	PHILIPS
D810		2363215495	DIODE,RECT	BYV26C	PHILIPS
D811		2363215495	DIODE,RECT	BYV26C	PHILIPS
D812	RA	2363218395	DIODE,RECT	BYV95B	PHILIPS
D812	RB	2363208095	DIODE,RECT	10DF4	
D813		2363212000	DIODE,RECT	31DF4 3.0A 400V	FRONTIER
D814		2363214712	DIODE,RECT	30DF2	IR
D815		2363214712	DIODE,RECT	30DF2	IR
D818		2363600195	DIODE,SWITCH	1N4148	
D830		2363600195	DIODE,SWITCH	1N4148	
D831		2363212012	DIODE,RECT	31DF4 3.0A 400V	
D833		2363600195	DIODE,SWITCH	1N4148	
F801		2213125200	FUSE	BEL 5TT 2.5A 250V	
F801M		2407213100	HOLDER,FUSE	E-102 BSR-2A-H	
IC101		2365408500	IC,DIGITAL	JD156H 69K MICON	
IC102		2365316200	IC,LINEAR	24LC16B	MICROCHI
IC103	RA	2365401500	IC,DIGITAL	HD74LS86	HITACHI
IC103	RB	2365308500	IC,LINEAR	74LS86N	TEXAS
IC301		2365316900	IC,LINEAR	TDA4866	PHILIPS
IC401		2365316800	IC,LINEAR	TDA4852	PHILIPS
IC402	RA	2365315600	IC,LINEAR	LM317T	NS
IC402	RB	2365315620	IC,LINEAR	KA317	SAMSUNG
IC403		2365317800	IC,LINEAR	LM324N	PHILIPS
IC404	RA	2365318800	IC,LINEAR	HEF4066BP	PHILIPS
IC404	RB	2365318400	IC,LINEAR	CD4066BCN	NS
IC801		2365311500	IC,LINEAR	KA3842B	SAMSUNG
IC802	RA	2365202000	IC,MONO	NE555N	PHILIPS
IC802	RB	2365201710	IC,MONO	NE555P	TI
IC803		2365307300	IC,LINEAR	TL431CLP	MOTOROLA
IC804		2365313800	IC,LINEAR	KA7805	SAMSUNG
L402		2371105000	COIL,CHOKE	JD156H 6.8UH 14.5T 0.028OHM	
L403		2371130900	COIL,CHOKE	JD156G 3.5UH9.5T REF	
L404		2385502900	COIL,H LNR	JD156H 11.2UH(0A) 29.5T	
L405		2371154700	COIL,CHOKE	JD176 90UH 39.5T(REF)	
L406		2371131500	COIL,CHOKE	JD156H 9mH/2UEW0.2 ϕ 440.5T	
L407		2371154800	COIL,CHOKE	JD176 155UH 45.5T(REF)	
L408		2232647995	RES,CBN 1/2	1/2W 4.70 J	
L801		2371110400	COIL,CHOKE	HUA HJC-	
L802		2371110400	COIL,CHOKE	HUA HJC-	
L804		2372210195	COIL,PEAKING	100.00UH K R<4.10 I 165mA	
L805		2371131400	COIL,CHOKE	JD156H 800UH ϕ 0.5 110.5T	
L806		2232610095	RES,CBN 1/2	1/2W 10.00 J	
L808		2379101495	CORE,BEADS	TDK BF45TSA-3.5X9X0.8	
L809		2379101495	CORE,BEADS	TDK BF45TSA-3.5X9X0.8	
L810		2379101495	CORE,BEADS	TDK BF45TSA-3.5X9X0.8	
L811		2379101495	CORE,BEADS	TDK BF45TSA-3.5X9X0.8	
L812		2379101495	CORE,BEADS	TDK BF45TSA-3.5X9X0.8	
LD101		2363703200	LED	L-53GD	KINGBRIG
LD102		2363703200	LED	L-53GD	KINGBRIG
LD103		2363703200	LED	L-53GD	KINGBRIG
LD104		2363703200	LED	L-53GD	KINGBRIG
LD401		2363703400	LED	KINGBRIGHT L-59YGW	
M801		2379101900	FERRITE CORE	CORE(u=1500)/1015#18 G&Y 270L	
P102		2404338003	CONNECTOR	LEOCO 2521 4PIN P=2.5	
P402		2427412432	WIRE HARNESS	5264-10P/5395-10P 1007#26L250	
P403		2404305003	CONNECTOR	2-6PIN-1610 4PIN	
P801		2404305001	CONNECTOR	2-6PIN-1610 2PIN	
Q101	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q101	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.	REMARK
Q307	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q307	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG
Q402	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q402	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG
Q403	RA	2361111491	XISTOR,PNP R	2PA733P	PHILIPS
Q403	RB	2361110791	XISTOR,PNP R	KSA733-G	SAMSUNG
Q404	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q404	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG
Q405	RA	2361111491	XISTOR,PNP R	2PA733P	PHILIPS
Q405	RB	2361110791	XISTOR,PNP R	KSA733-G	SAMSUNG
Q406		2361303291	XISTOR,NPN R	2SC2655(Y)	
Q407		2361316200	XISTOR,NPN R	BU2520AF	PHILIPS
Q408	RA	2361604900	FET,N-CH	BUK455-200A	PHILIPS
Q408	RB	2361601800	FET,N-CH	IRF630	SAMSUNG
Q409	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q409	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG
Q410	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q410	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG
Q411		2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q413		2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q414		2361411600	XISTOR,NPN A	2SD1264A-P	PANASONI
Q415		2361210191	XISTOR,PNP A	2SB647	HITACHI
Q416		2361111391	XISTOR,PNP R	2SA1376A(L)	NEC
Q417		2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q418	RA	2361111491	XISTOR,PNP R	2PA733P	PHILIPS
Q418	RB	2361110791	XISTOR,PNP R	KSA733-G	SAMSUNG
Q419	RA	2361111491	XISTOR,PNP R	2PA733P	PHILIPS
Q419	RB	2361110791	XISTOR,PNP R	KSA733-G	SAMSUNG
Q420		2361402000	XISTOR,NPN A	2SD669(A)	HITACHI
Q423	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q423	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG
Q424		2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q425		2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q804	RA	2361601200	FET,N-CH	2SK1507	FUJITSU
Q804	RB	2361604500	FET,N-CH	FS10KM-12	MITSUBIS
Q807		2361111191	XISTOR,PNP R	2SA1020(Y)	TOSHIBA
Q809	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q809	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG
Q810	RA	2361604600	FET,N-CH	FS10KM-5	MITSUBIS
Q810	RB	2361604800	FET,N-CH	2SK1917-M	FUJI
Q811	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q811	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG
Q812	RA	2361316191	XISTOR,NPN R	2PC945P	PHILIPS
Q812	RB	2361313691	XISTOR,NPN R	KSC945-G	SAMSUNG
R101		2233410395	RES,CBN 1/4 S	1/4WS 10.00K	J
R102		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R103		2233451195	RES,CBN 1/4 S	1/4WS 510.00	J
R104		2233451195	RES,CBN 1/4 S	1/4WS 510.00	J
R107		2233451195	RES,CBN 1/4 S	1/4WS 510.00	J
R109		2233451195	RES,CBN 1/4 S	1/4WS 510.00	J
R110		2233410495	RES,CBN 1/4 S	1/4WS 100.00K	J
R111		2233433295	RES,CBN 1/4 S	1/4WS 3.30K	J
R112		2233433295	RES,CBN 1/4 S	1/4WS 3.30K	J
R113		2233410395	RES,CBN 1/4 S	1/4WS 10.00K	J
R114		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R115		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R116		2233439295	RES,CBN 1/4 S	1/4WS 3.90K	J
R117		2233420295	RES,CBN 1/4 S	1/4WS 2.00K	J
R119		2233410295	RES,CBN 1/4 S	1/4WS 1.00K	J
R120		2233410295	RES,CBN 1/4 S	1/4WS 1.00K	J
R121		2233410295	RES,CBN 1/4 S	1/4WS 1.00K	J
R123		2233451395	RES,CBN 1/4 S	1/4WS 51.00K	J
R124		2233447295	RES,CBN 1/4 S	1/4WS 4.70K	J
R125		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R128		2233416295	RES,CBN 1/4 S	1/4WS 1.60K	J
R130		2233430295	RES,CBN 1/4 S	1/4WS 3.00K	J
R131		2233430295	RES,CBN 1/4 S	1/4WS 3.00K	J
R132		2233430295	RES,CBN 1/4 S	1/4WS 3.00K	J
R133		2233430295	RES,CBN 1/4 S	1/4WS 3.00K	J
R134		2233430295	RES,CBN 1/4 S	1/4WS 3.00K	J
R135		2233430295	RES,CBN 1/4 S	1/4WS 3.00K	J

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.	REMARK	Q'TY
R136		2233410495	RES,CBN 1/4 S	1/4WS	100.00K	J
R137		2233410195	RES,CBN 1/4 S	1/4WS	100.00	J
R138		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R301		2239222025	RES,PRE 1/4 S	1/4WS	22.00K	F
R302		2233427495	RES,CBN 1/4 S	1/4WS	270.00K	J
R303		2233418495	RES,CBN 1/4 S	1/4WS	180.00K	J
R305		2233475495	RES,CBN 1/4 S	1/4WS	750.00K	J
R306		2233410495	RES,CBN 1/4 S	1/4WS	100.00K	J
R307		2233456395	RES,CBN 1/4 S	1/4WS	56.00K	J
R308		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R309		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R310		2233410295	RES,CBN 1/4 S	1/4WS	1.00K	J
R312		2233456395	RES,CBN 1/4 S	1/4WS	56.00K	J
R314		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R315		2233420395	RES,CBN 1/4 S	1/4WS	20.00K	J
R316		2233415295	RES,CBN 1/4 S	1/4WS	1.50K	J
R317		2233415295	RES,CBN 1/4 S	1/4WS	1.50K	J
R318		2233468495	RES,CBN 1/4 S	1/4WS	680.00K	J
R319		2233443495	RES,CBN 1/4 S	1/4WS	430.00K	J
R320		2233412495	RES,CBN 1/4 S	1/4WS	120.00K	J
R321		2235468195	RES,MTL 1	1W	680.00	J
R322		2235513903	RES,MTL 2	2W	1.30	J
R323		2232610095	RES,CBN 1/2	1/2W	10.00	J
R325		2239224915	RES,PRE 1/4 S	1/4WS	2.49K	F
R326		2232610295	RES,CBN 1/2	1/2W	1.00K	J
R327		2233415495	RES,CBN 1/4 S	1/4WS	150.00K	J
R328		2233422395	RES,CBN 1/4 S	1/4WS	22.00K	J
R334		2233447395	RES,CBN 1/4 S	1/4WS	47.00K	J
R335		2233447295	RES,CBN 1/4 S	1/4WS	4.700K	J
R337		2233415395	RES,CBN 1/4 S	1/4WS	15.00K	J
R339		2233418395	RES,CBN 1/4 S	1/4WS	18.00K	J
R340		2233422295	RES,CBN 1/4 S	1/4WS	2.20K	J
R344		2233411395	RES,CBN 1/4 S	1/4WS	11.00K	J
R345		2233412395	RES,CBN 1/4 S	1/4WS	12.00K	J
R349		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R401		2233422395	RES,CBN 1/4 S	1/4WS	22.00K	J
R402		2233410495	RES,CBN 1/4 S	1/4WS	100.00K	J
R403		2233427495	RES,CBN 1/4 S	1/4WS	270.00K	J
R404		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R405		2239210015	RES,PRE 1/4 S	1/4WS	1.00K	F
R406		2233422195	RES,CBN 1/4 S	1/4WS	220.00	J
R407		2233430295	RES,CBN 1/4 S	1/4WS	3.00K	J
R408		2233410295	RES,CBN 1/4 S	1/4WS	1.00K	J
R410		2233491295	RES,CBN 1/4 S	1/4WS	9.10K	J
R411		2233412395	RES,CBN 1/4 S	1/4WS	12.00K	J
R412		2233422295	RES,CBN 1/4 S	1/4WS	2.20K	J
R413		2233468195	RES,CBN 1/4 S	1/4WS	680.00	J
R415		2233418495	RES,CBN 1/4 S	1/4WS	180.00K	J
R416		2233410295	RES,CBN 1/4 S	1/4WS	1.00K	J
R417		2233443295	RES,CBN 1/4 S	1/4WS	4.30K	J
R418		2233422395	RES,CBN 1/4 S	1/4WS	22.00K	J
R419		2233410095	RES,CBN 1/4 S	1/4WS	10.00	J
R420		2240833033	RES,MTL 5	5W	33.00	J
R421		2239275015	RES,PRE 1/4 S	1/4WS	7.50K	F
R422		2233420395	RES,CBN 1/4 S	1/4WS	20.00K	J
R423		2233422295	RES,CBN 1/4 S	1/4WS	2.20K	J
R424		2239230125	RES,PRE 1/4 S	1/4WS	30.10K	F
R425		2239241215	RES,PRE 1/4 S	1/4WS	4.12K	F
R426		2233410295	RES,CBN 1/4 S	1/4WS	1.00K	J
R427		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R428		2233447195	RES,CBN 1/4 S	1/4WS	470.00	J
R430		2233410295	RES,CBN 1/4 S	1/4WS	1.00K	J
R431		2235412195	RES,MTL 1	1W	120.00	J
R432		2235522903	RES,MTL 2	2W	2.20	J
R433		2232622095	RES,CBN 1/2	1/2W	22.00	J
R434		2235547803	RES,MTL 2	2W	0.47	J
R435		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R436		2235522903	RES,MTL 2	2W	2.20	J
R437		2233410395	RES,CBN 1/4 S	1/4WS	10.00K	J
R438		2235512103	RES,MTL 2	2W	120.00	J
R439		2233422295	RES,CBN 1/4 S	1/4WS	2.20K	J

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.		REMARK
R440		2233410595	RES,CBN 1/4 S	1/4WS	1.00M	J
R441		2232647995	RES,CBN 1/2	1/2W	4.70	J
R443		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R444		2232622395	RES,CBN 1/2	1/2W	22.00K	J
R445		2233422295	RES,CBN 1/4 S	1/4WS	2.20K	J
R446		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R447		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R448		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R449		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R450		2239239115	RES,PRE 1/4 S	1/4WS	3.91K	F
R451		2233430295	RES,CBN 1/4 S	1/4WS	3.00K	J
R452		2233439395	RES,CBN 1/4 S	1/4WS	39.00K	J
R453		2233424295	RES,CBN 1/4 S	1/4WS	2.40K	J
R454		2233468195	RES,CBN 1/4 S	1/4WS	680.00	J
R455		2233427295	RES,CBN 1/4 S	1/4WS	2.70K	J
R456		2239233205	RES,PRE 1/4 S	1/4WS	332.00	F
R457		2235533303	RES.MTL 2	2W	33.00K	J
R458		2232612195	RES,CBN 1/2	1/2W	120.00	J
R461		2233422495	RES,CBN 1/4 S	1/4WS	220.00K	J
R462		2233410495	RES,CBN 1/4 S	1/4WS	100.00K	J
R463		2233410295	RES,CBN 1/4 S	1/4WS	1.00K	J
R464		2233420295	RES,CBN 1/4 S	1/4WS	2.00K	J
R465		2233468295	RES,CBN 1/4 S	1/4WS	6.80K	J
R466		2233410395	RES,CBN 1/4 S	1/4WS	10.00K	J
R467		2233430495	RES,CBN 1/4 S	1/4WS	300.00K	J
R468		2233443395	RES,CBN 1/4 S	1/4WS	43.00K	J
R470		2233420495	RES,CBN 1/4 S	1/4WS	200.00K	J
R471		2233422595	RES,CBN 1/4 S	1/4WS	2.20M	J
R472		2233420395	RES,CBN 1/4 S	1/4WS	20.00K	J
R473		2233468295	RES,CBN 1/4 S	1/4WS	6.80K	J
R474		2233436495	RES,CBN 1/4 S	1/4WS	360.00K	J
R475		2233410395	RES,CBN 1/4 S	1/4WS	10.00K	J
R477		2235547003	RES.MTL 2	2W	47.00	J
R486		2233433495	RES,CBN 1/4 S	1/4WS	330.00K	J
R487		2233433395	RES,CBN 1/4 S	1/4WS	33.00K	J
R488		2233410495	RES,CBN 1/4 S	1/4WS	100.00K	J
R489		2233410495	RES,CBN 1/4 S	1/4WS	100.00K	J
R490		2233443195	RES,CBN 1/4 S	1/4WS	430.00	J
R491		2233422195	RES,CBN 1/4 S	1/4WS	220.00	J
R492		2235433103	RES.MTL 1	1W	330.00	J
R493		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R494		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R495		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R496		2233447295	RES,CBN 1/4 S	1/4WS	4.70K	J
R498		2233410395	RES,CBN 1/4 S	1/4WS	10.00K	J
R801		2235447495	RES.MTL 1	1W	470.00K	J
R802	RA	2229201212	THERMISTOR.PTH	SCK-103 10+-20% 3A	THINKING	
R802	RB	2229400612	THERMISTOR.NTC	NTC UPPERMOST N10SP010***-K2		
R803		2233420995	RES,CBN 1/4 S	1/4WS	2.00	J
R805		2235439395	RES.MTL 1	1W	39.00K	J
R806		2235439395	RES.MTL 1	1W	39.00K	J
R808		2233410195	RES,CBN 1/4 S	1/4WS	100.00	J
R811		2233468295	RES,CBN 1/4 S	1/4WS	6.80K	J
R812		2233420395	RES,CBN 1/4 S	1/4WS	20.00K	J
R813		2233447095	RES,CBN 1/4 S	1/4WS	47.00	J
R814		2233420195	RES,CBN 1/4 S	1/4WS	200.00	J
R815		2233420195	RES,CBN 1/4 S	1/4WS	200.00	J
R816		2233410495	RES,CBN 1/4 S	1/4WS	100.00K	J
R817		2233410295	RES,CBN 1/4 S	1/4WS	1.00K	J
R818		2233468495	RES,CBN 1/4 S	1/4WS	680.00K	J
R819		2233418395	RES,CBN 1/4 S	1/4WS	18.00K	J
R820		2233420295	RES,CBN 1/4 S	1/4WS	2.00K	J
R821		2232610295	RES,CBN 1/2	1/2W	1.00K	J
R822		2235433895	RES.MTL 1	1W	0.33	J
R823		2235447395	RES.MTL 1	1W	47.00K	J
R824		2233418095	RES,CBN 1/4 S	1/4WS	18.00	J
R826		2233410295	RES,CBN 1/4 S	1/4WS	1.00K	J
R827		2233415295	RES,CBN 1/4 S	1/4WS	1.50K	J
R828		2233410395	RES,CBN 1/4 S	1/4WS	10.00K	J
R829		2235533803	RES.MTL 2	2W	0.33	J
R830		2235522103	RES.MTL 2	2W	220.00	J

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.	REMARK
R833		2233410395	RES,CBN 1/4 S	1/4WS 10.00K	J
R834		2233420195	RES,CBN 1/4 S	1/4WS 200.00	J
R838		2233447295	RES,CBN 1/4 S	1/4WS 4.70K	J
R850		2233410395	RES,CBN 1/4 S	1/4WS 10.00K	J
R851		2233410295	RES,CBN 1/4 S	1/4WS 1.00K	J
R852		2233410095	RES,CBN 1/4 S	1/4WS 10.00	J
R853		2233410295	RES,CBN 1/4 S	1/4WS 1.00K	J
R854		2233418395	RES,CBN 1/4 S	1/4WS 18.00K	J
R855		2233447195	RES,CBN 1/4 S	1/4WS 470.00	J
R856		2233410295	RES,CBN 1/4 S	1/4WS 1.00K	J
R857		2233439295	RES,CBN 1/4 S	1/4WS 3.90K	J
R858		2233410295	RES,CBN 1/4 S	1/4WS 1.00K	J
R859		2233410295	RES,CBN 1/4 S	1/4WS 1.00K	J
R860		2233430295	RES,CBN 1/4 S	1/4WS 3.00K	J
R861		2233439395	RES,CBN 1/4 S	1/4WS 39.00K	J
R862		2233410395	RES,CBN 1/4 S	1/4WS 10.00K	J
R863		2232620195	RES,CBN 1/2	1/2W 200.00	J
R864		2233410495	RES,CBN 1/4 S	1/4WS 100.00K	J
R865		2233420295	RES,CBN 1/4 S	1/4WS 2.00K	J
R872		2233410495	RES,CBN 1/4 S	1/4WS 100.00K	J
SK801		2407411400	SOCKET	POWER SOCKET SC-9 DIP SUPERCON	
SW101		2403701100	SWITCH.PU-TC	SKHH33A520-SV	
SW801		2403104400	SWITCH.PUSH	SFDLB11C7u	FORWARD
PR801	RA	2229301000	THERMISTOR.PTC	PTC 14+-20% PTAD14KZ-140M271	
PR801	RB	2229300500	THERMISTOR.PTC	PTC 14+-20%	
RL401		2413101600	RELAY.DC	JS1F-12V	MATSUSHITA
T401		2374204800	XFORMER.POWR	JD176 1.5MH/60UH 80T/16T REF	
T402	RA	2385205300	FBT	FBT	
T402	RB	2385205600	FBT	DFBTEA565-151A	SAMPO
T801	RA	2371155200	COIL,CHOKE	SR28X28V 03-5046	MYLEE
T801	RB	2371155300	COIL,CHOKE	FET28S-V21603-956130 HUA JUNG	
T801	RC	2371155100	COIL,CHOKE	HE2835-163YIR5-T01A TDK	
T803		2374205700	XFORMER.POWR	JD156H 295UH/0.40HM/46T	
TP401		2431400300	TERMINAL	TERMINAL	
TP402		2431400300	TERMINAL	TERMINAL	
TP405		2404200100	PIN PLUG	UZ-006P(1P-A)	
TP801		2404200100	PIN PLUG	UZ-006P(1P-A)	
U001		2202103701	PC BOARD	JD156H MAIN 94V0 330X245 V2.01	
VR401		2225110291	RES,SEMI FIX	0.1 W B 1K	N
VR403		2225120390	RES,SEMI FIX	0.1 W B 20K	N
VR404		2225110390	RES,SEMI FIX	0.1 W B 10K	N
VR405		2220112022	RES,V CBN 9	RK09K1110471(SV) 0.05W B 10K M	
VR406		2220112024	RES,V CBN 9	RK09K1110604(SV) 0.05W B 100K	
VR801		2225110291	RES,SEMI FIX	0.1 W B 1K	N
VR802		2225150390	RES,SEMI FIX	0.1 W B 50K	N
X101		2369101100	XTAL.OSC	10.000MHZ HC-49/U 20PF 1MW	
ZD302		2363510495	DIODE,ZENER	UZ-24BHTA 24.2-25.7V 0.5W	
ZD401		2363510895	DIODE,ZENER	HZ9 C-1 8.9-9.3V 0.5W HITACHI	
ZD402		2363506395	DIODE,ZENER	HZ15-2 14.5-15.1V 0.5W HITACHI	
ZD403		2363507695	DIODE,ZENER	1N990B	
ZD801		2363500995	DIODE,ZENER	HZ5C-2 5.0-5.2V 0.5W HITACHI	
ZD803		2363510495	DIODE,ZENER	UZ-24BHTA 24.2-25.7V 0.5W	

CRT P.C.BOARD

C902	2331410791	CAP.MINI ELE	100.000UF 25V	M
C904	2281410491	CAP.CER	0.100UF 50V	Z
C905	2333947591	CAP.MINI ELE 105	4.700UF 160V	M
C906	2333947591	CAP.MINI ELE 105	4.700UF 160V	M
C907	2281410491	CAP.CER	0.100UF 50V	Z
C908	2281410491	CAP.CER	0.100UF 50V	Z
C909	2333947591	CAP.MINI ELE 105	4.700UF 160V	M
C912	2281410491	CAP.CER	0.100UF 50V	Z
C913	2331410791	CAP.MINI ELE	100.000UF 25V	M
C915	2285210201	CAP.CER	1000.000PF 2KV	K
C917	2272112191	CAP.CER	120.000PF 50V	J
C919	2272112191	CAP.CER	120.000PF 50V	J
C920	2272115191	CAP.CER	150.000PF 50V	J
C922	2281410491	CAP.CER	0.100UF 50V	Z
C930	2331610691	CAP.MINI ELE	10.000UF 50V	M
C931	2281410491	CAP.CER	0.100UF 50V	Z

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.	REMARK
C932		2272110191	CAP,CER	100.000PF 50V	J
C933		2272110191	CAP,CER	100.000PF 50V	J
C934		2272110191	CAP,CER	100.000PF 50V	J
C935		2285210201	CAP,CER	1000.000PF 2KV	K
C936		2291522391	CAP,MYL	0.022UF 100V	K
C937		2291522391	CAP,MYL	0.022UF 100V	K
C938		2291522391	CAP,MYL	0.022UF 100V	K
C939		2291522391	CAP,MYL	0.022UF 100V	K
C940		2281410491	CAP,CER	0.100UF 50V	Z
C941		2281410491	CAP,CER	0.100UF 50V	Z
C942		2331610791	CAP,MINI ELE	100.000UF 50V	M
D901		2363600195	DIODE,SWITCH	1N4148	
D902		2363600195	DIODE,SWITCH	1N4148	
D903		2363600195	DIODE,SWITCH	1N4148	
D905		2363600195	DIODE,SWITCH	1N4148	
D906		2363600195	DIODE,SWITCH	1N4148	
D907		2363206595	DIODE,RECT	RGP10G	FAGOR
D908		2363600195	DIODE,SWITCH	1N4148	
D909		2363600195	DIODE,SWITCH	1N4148	
D910		2363600195	DIODE,SWITCH	1N4148	
D912		2363600195	DIODE,SWITCH	1N4148	
D913		2363600195	DIODE,SWITCH	1N4148	
D914		2363600195	DIODE,SWITCH	1N4148	
IC901		2365317600	IC.LINEAR	TDA4882	PHILIPS
IC902		2365408300	IC.DIGITAL	PCB2421P	PHILIPS
L901		2372222995	COIL,PEAKING	2.20UH K R<0.25 I 630mA	
L902		2372210995	COIL,PEAKING	1.00UH K R<0.15 I 815mA	
L903		2372222995	COIL,PEAKING	2.20UH K R<0.25 I 630mA	
L904		2372222995	COIL,PEAKING	2.20UH K R<0.25 I 630mA	
L905		2379101495	CORE,BEADS	TDK BF45TSA-3.5X9X0.8	
L906		2372210995	COIL,PEAKING	1.00UH K R<0.15 I 815mA	
L907		2372210995	COIL,PEAKING	1.00UH K R<0.15 I 815mA	
L909		2379101495	CORE,BEADS	TDK BF45TSA-3.5X9X0.8	
L911		2372215095	COIL,PEAKING	15.00UH K R<0.93 I 335mA	
L912		2372215095	COIL,PEAKING	15.00UH K R<0.93 I 335mA	
L913		2372215095	COIL,PEAKING	15.00UH K R<0.93 I 335mA	
M901		2427307006	LUG W/WIRE	1441BS-2/J1012BS-2 1007#18 120L	
M902		2427307006	LUG W/WIRE	1441BS-2/J1012BS-2 1007#18 120L	
P901		2404351009	CONNECTOR	MOLEX 5267-10A 10PIN P=2.5	
P902		2404300011	CONNECTOR	B12B-XH-A 12PIN	
P904		2407402300	SOCKET	CRT SOCKET HPS0520-012401	
Q901	RA	2361411300	XISTOR.NPN A	2SD2491C	HITACHI
Q901	RB	2361311100	XISTOR.NPN R	2SC3953DE	SANYO
Q902		2361110691	XISTOR.PNP R	2SA1208-S	SANYO
Q903		2361313391	XISTOR.NPN R	2SC2910-S	SANYO
Q904		2361110691	XISTOR.PNP R	2SA1208-S	SANYO
Q905		2361313391	XISTOR.NPN R	2SC2910-S	SANYO
Q906	RA	2361411300	XISTOR.NPN A	2SD2491C	HITACHI
Q906	RB	2361311100	XISTOR.NPN R	2SC3953DE	SANYO
Q907		2361110691	XISTOR.PNP R	2SA1208-S	SANYO
Q908		2361313391	XISTOR.NPN R	2SC2910-S	SANYO
Q909	RA	2361411300	XISTOR.NPN A	2SD2491C	HITACHI
Q909	RB	2361311100	XISTOR.NPN R	2SC3953DE	SANYO
Q911	RA	2361316191	XISTOR.NPN R	2PC945P	PHILIPS
Q911	RB	2361313691	XISTOR.NPN R	KSC945-G	SAMSUNG
R902		2235547203	RES.MTL 2	2W 4.70K	J
R903		2233433095	RES.CBN 1/4 S	1/4WS 33.00	J
R904		2239242215	RES.PRE 1/4 S	1/4WS 4.22K	F
R905		2239251025	RES.PRE 1/4 S	1/4WS 51.00K	F
R906		2235547203	RES.MTL 2	2W 4.70K	J
R907		2233433095	RES.CBN 1/4 S	1/4WS 33.00	J
R908		2239242215	RES.PRE 1/4 S	1/4WS 4.22K	F
R909		2233433095	RES.CBN 1/4 S	1/4WS 33.00	J
R910		2239251025	RES.PRE 1/4 S	1/4WS 51.00K	F
R911		2233433195	RES.CBN 1/4 S	1/4WS 330.00	J
R912		2233410395	RES.CBN 1/4 S	1/4WS 10.00K	J
R918		2233422295	RES.CBN 1/4 S	1/4WS 2.20K	J
R921		2235530903	RES.MTL 2	2W 3.00	J
R922		2232647095	RES.CBN 1/2	1/2W 47.00	J
R923		2239251025	RES.PRE 1/4 S	1/4WS 51.00K	F
R924		2239242215	RES.PRE 1/4 S	1/4WS 4.22K	F

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.	REMARK
R925		2232651395	RES,CBN 1/2	1/2W 51.00K	J
R926		2232647095	RES,CBN 1/2	1/2W 47.00	J
R928		2233433095	RES,CBN 1/4 S	1/4WS 33.00	J
R929		2233482095	RES,CBN 1/4 S	1/4WS 82.00	J
R930		2233433095	RES,CBN 1/4 S	1/4WS 33.00	J
R931		2233422095	RES,CBN 1/4 S	1/4WS 22.00	J
R932		2233482095	RES,CBN 1/4 S	1/4WS 82.00	J
R935		2233422095	RES,CBN 1/4 S	1/4WS 22.00	J
R938		2233422095	RES,CBN 1/4 S	1/4WS 22.00	J
R939		2233433095	RES,CBN 1/4 S	1/4WS 33.00	J
R940		2233482095	RES,CBN 1/4 S	1/4WS 82.00	J
R941		2233433095	RES,CBN 1/4 S	1/4WS 33.00	J
R944		2233422095	RES,CBN 1/4 S	1/4WS 22.00	J
R954		2233410295	RES,CBN 1/4 S	1/4WS 1.00K	J
R955		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R956		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R957		2232610295	RES,CBN 1/2	1/2W 1.00K	J
R958		2233433095	RES,CBN 1/4 S	1/4WS 33.00	J
R959		2233422195	RES,CBN 1/4 S	1/4WS 220.00	J
R960		2233422195	RES,CBN 1/4 S	1/4WS 220.00	J
R961		2233422195	RES,CBN 1/4 S	1/4WS 220.00	J
R962		2233410695	RES,CBN 1/4 S	1/4WS 10.00M	J
R963		2233410695	RES,CBN 1/4 S	1/4WS 10.00M	J
R964		2233410695	RES,CBN 1/4 S	1/4WS 10.00M	J
R965		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R966		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R967		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R968		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R969		2233410195	RES,CBN 1/4 S	1/4WS 100.00	J
R970		2239207505	RES.PRE 1/4 S	1/4WS 75.00	F
R971		2239207505	RES.PRE 1/4 S	1/4WS 75.00	F
R972		2239207505	RES.PRE 1/4 S	1/4WS 75.00	F
R973		2232647095	RES,CBN 1/2	1/2W 47.00	J
R974		2235547203	RES.MTL 2	2W 4.70K	J
R975		2235530903	RES.MTL 2	2W 3.00	J
R976		2233420195	RES,CBN 1/4 S	1/4WS 200.00	J
R977		2233447395	RES,CBN 1/4 S	1/4WS 47.00K	J
R978		2233447395	RES,CBN 1/4 S	1/4WS 47.00K	J
R980		2235547203	RES.MTL 2	2W 4.70K	J
R981		2235547203	RES.MTL 2	2W 4.70K	J
R982		2235547203	RES.MTL 2	2W 4.70K	J
R986		2233422095	RES,CBN 1/4 S	1/4WS 22.00	J
R987		2233422095	RES,CBN 1/4 S	1/4WS 22.00	J
R988		2233422095	RES,CBN 1/4 S	1/4WS 22.00	J
TP901		2404200100	PIN PLUG	UZ-006P(1P-A)	
TP902		2404200100	PIN PLUG	UZ-006P(1P-A)	
U002		2202103801	PC BOARD	JD156H CRT 94V0 110X142 V2.01	
VR901		2225120291	RES,SEMI FIX	0.1 W B 2K	N
VR902		2225120291	RES,SEMI FIX	0.1 W B 2K	N
VR903		2225120291	RES,SEMI FIX	0.1 W B 2K	N
VR904		2225110391	RES,SEMI FIX	0.1 W B 10K	N
VR905		2225110391	RES,SEMI FIX	0.1 W B 10K	N
ZD902		2363500995	DIODE.ZENER	HZ5C-2 5.0-5.2V 0.5W	HITACHI

OTHERS

P906		2427501029	I/O CABLE	D-SUB 15P MALE/JST 12P DDC	
P907		2427130001	POWER CORD	SVT 18/3C GRAY 1.5M	WALL TYPE
P907		2427125001	POWER CORD	H05VV-F 0.75/3C 2468 GRAY 1.5M	PC TYPE
L807		2385403300	COIL.ERASE	JD156H 0.4x80T 1125L W AI&W	
P900		2420102100	CRT WIRE	JD156H 0.12/64C 745L	
V901	AA	2211006200	CRT ASSY	M36EDR320x131/2F01	MPR II (PHILIPS)
V901	BA	2211007100	CRT ASSY	M36AES83x46	MPR II (CPT)
V901	CA	2211009900	CRT ASSY	M36KPC030x01	MPR II (MATSUSHITA)
C422	AB	2296651212	CAP.PPP	5100.000PF 630V	MPR II (PHILIPS)
C422	BB	2296656212	CAP.PPP	5600.000PF 630V	MPR II (CPT)
C422	CB	2296656212	CAP.PPP	5600.000PF 630V	MPR II (MATSUSHITA)
R319	AC	2233443495	RES,CBN 1/4 S	1/4WS 430.00K	MPR II (PHILIPS)
R319	BC	2233430495	RES,CBN 1/4 S	1/4WS 300.00K	MPR II (CPT)
R319	CC	2233430495	RES,CBN 1/4 S	1/4WS 300.00K	MPR II (MATSUSHITA)
R325	AD	2239224915	RES.PRE 1/4 S	1/4WS 2.49K	MPR II (PHILIPS)

LOC NO.	SOURCE	PART NO.	DESCRIPTION	SPEC.			REMARK
R325	BD	2239222015	RES,PRE 1/4 S	1/4WS	2.20K	F	MPR II (CPT)
R325	CD	2239222015	RES,PRE 1/4 S	1/4WS	2.20K	F	MPR II (MATSUSHITA)
R453	AE	2233424295	RES,CBN 1/4 S	1/4WS	2.40K	J	MPR II (PHILIPS)
R453	BE	2233427295	RES,CBN 1/4 S	1/4WS	2.70K	J	MPR II (CPT)
R453	CE	2233427295	RES,CBN 1/4 S	1/4WS	2.70K	J	MPR II (MATSUSHITA)
R326	AF	2232610295	RES,CBN 1/2	1/2W	1.00K	J	MPR II (PHILIPS)
R326	BF	2232627195	RES,CBN 1/2	1/2W	270.00	J	MPR II (CPT)
R326	CF	2232627195	RES,CBN 1/2	1/2W	270.00	J	MPR II (MATSUSHITA)
R975	AG	2235530903	RES,MTL 2	2W	3.00	J	MPR II (PHILIPS)
R975	BG	2235530903	RES,MTL 2	2W	3.00	J	MPR II (CPT)
R975	CG	2235513903	RES,MTL 2	2W	1.30	J	MPR II (MATSUSHITA)
R921	AH	2235530903	RES,MTL 2	2W	3.00	J	MPR II (PHILIPS)
R921	BH	2235530903	RES,MTL 2	2W	3.00	J	MPR II (CPT)
R921	CH	2235513903	RES,MTL 2	2W	1.30	J	MPR II (MATSUSHITA)
R470	AI	2233420495	RES,CBN 1/4 S	1/4WS	200.00K	J	MPR II (PHILIPS)
R470	BI	2233416495	RES,CBN 1/4 S	1/4WS	160.00K	J	MPR II (CPT)
R470	CI	2233416495	RES,CBN 1/4 S	1/4WS	160.00K	J	MPR II (MATSUSHITA)
R327	AJ	2233415495	RES,CBN 1/4 S	1/4WS	150.00K	J	MPR II (PHILIPS)
R327	BJ	2233411495	RES,CBN 1/4 S	1/4WS	110.00K	J	MPR II (CPT)
R327	CJ	2233411495	RES,CBN 1/4 S	1/4WS	110.00K	J	MPR II (MATSUSHITA)
R339	AK	2233418395	RES,CBN 1/4 S	1/4WS	18.00K	J	MPR II (PHILIPS)
R339	BK	2233415395	RES,CBN 1/4 S	1/4WS	15.00K	J	MPR II (CPT)
R339	CK	2233415395	RES,CBN 1/4 S	1/4WS	15.00K	J	MPR II (MATSUSHITA)
R334	AL	2233447395	RES,CBN 1/4 S	1/4WS	47.00K	J	MPR II (PHILIPS)
R334	BL	2233439395	RES,CBN 1/4 S	1/4WS	39.00K	J	MPR II (CPT)
R334	CL	2233439395	RES,CBN 1/4 S	1/4WS	39.00K	J	MPR II (MATSUSHITA)

FUN	LED1	LED2	LED3	LED4
H-PHASE	o	o		
H-SIZE		o		
V-PHASE			o	
V-SIZE				o
PINX	o	o		
KEYSTONE			o	o

	CS0	CS1	CS2
68K-53K	H	L	H
53K-42K	H	H	H
42K-36K	L	H	H
36K-29K	L	L	L

	E	B	C
Q101	0	0	10
Q301	15	14.3	15
Q302	0	0.5	0.7
Q307	0	0	24
Q402	0.5	0.5	1
Q403	10.4	10.4	
Q404	0	0	10.4

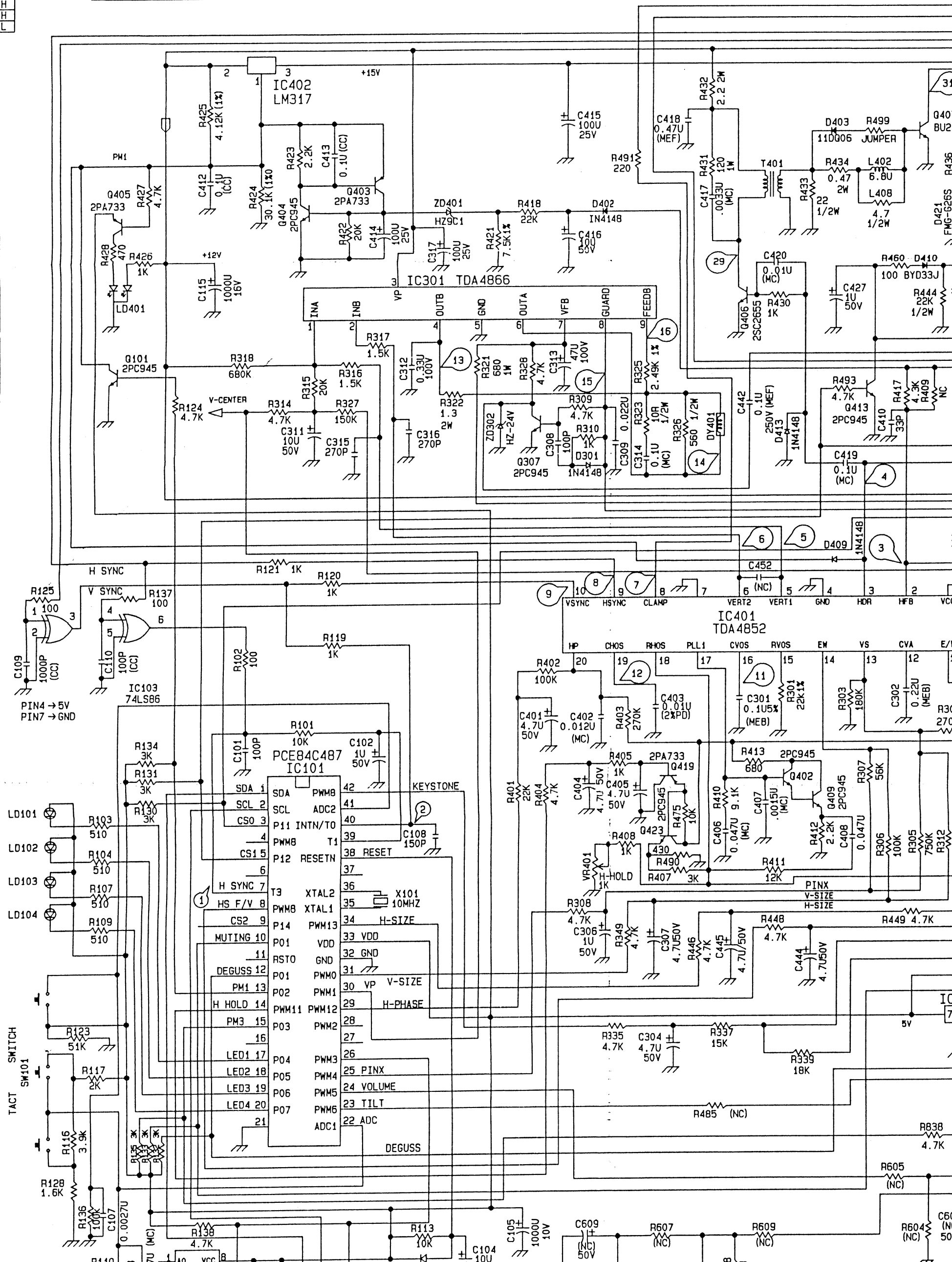
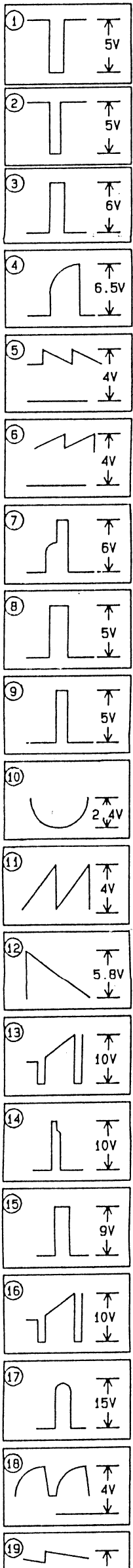
	E	B	C
Q405	4.5	10.6	1
Q406	0	0.8	14
Q407			1200
Q408	0	0	14.3
Q409	5	5.4	10
Q410	0	0	11
Q411	0	4.9	0

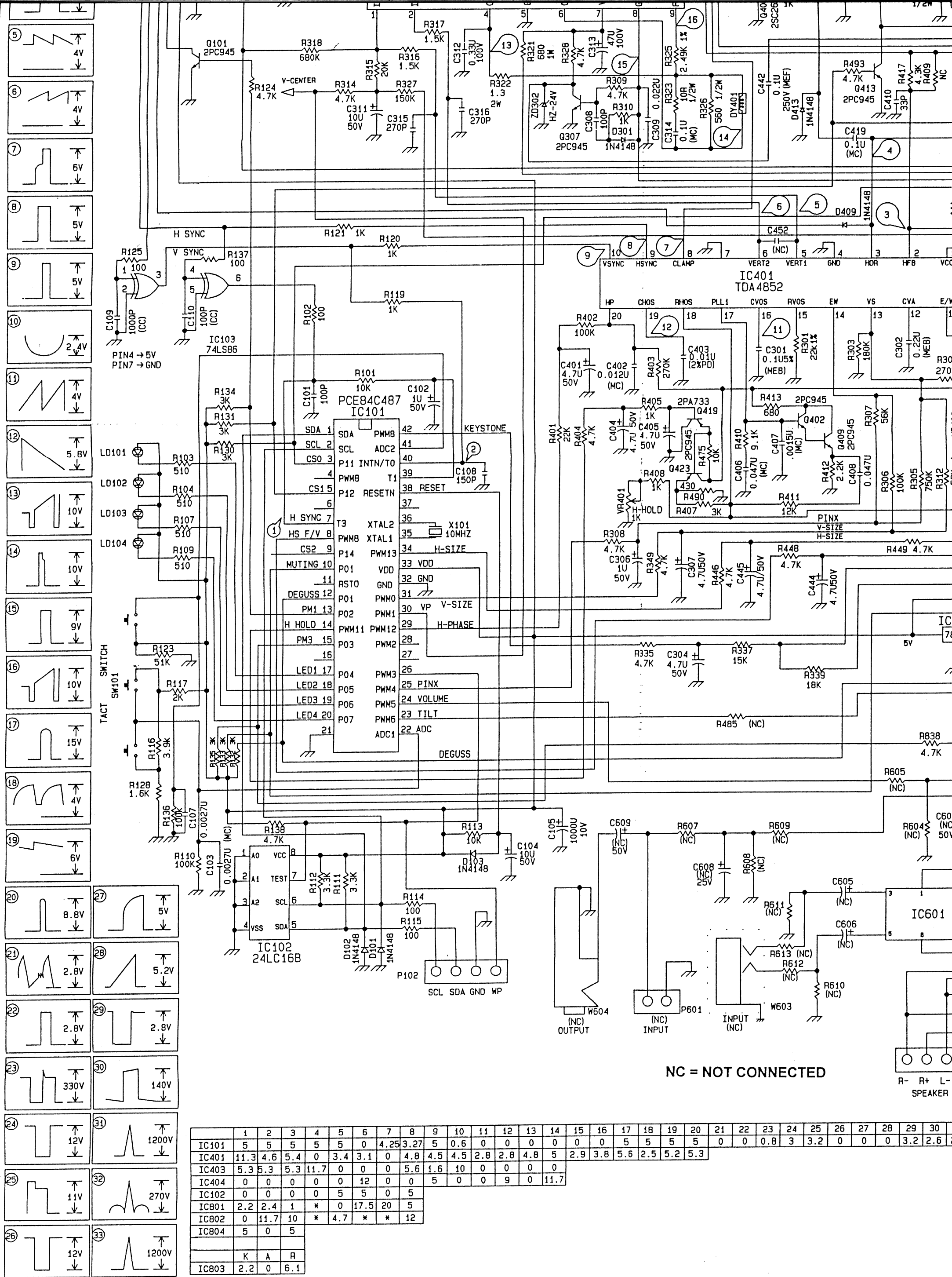
	E	B	C
Q413	0	4.9	0
Q414	0	0.5	24.9
Q415	25.3	25.3	0.5
Q416	13.7	13.1	13.7
Q417	0	0	13.7
Q418	6	5.9	0
Q419	1.2	0.6	0

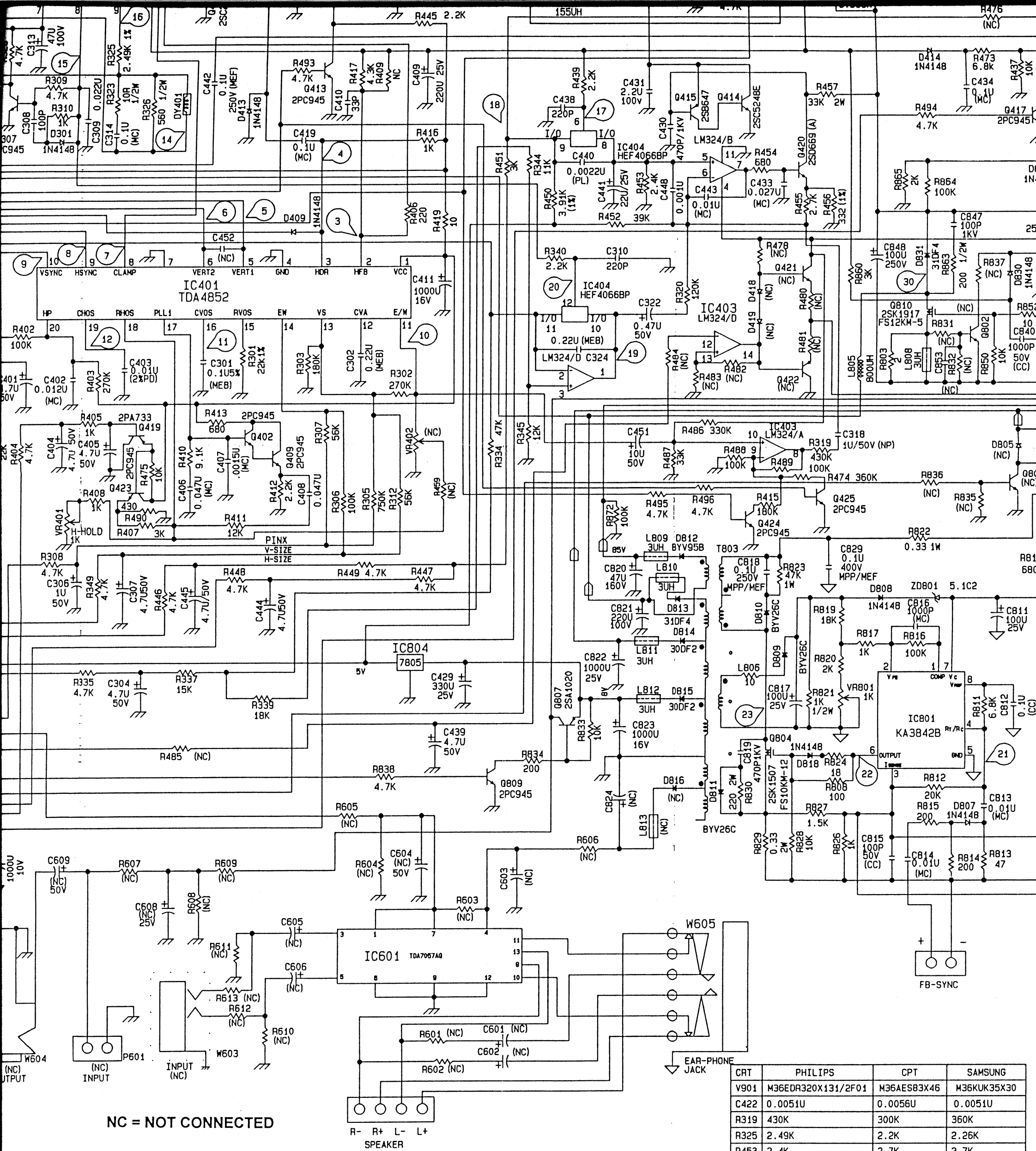
	E	B	C
Q420	1.1	1.6	25.1
Q423	0.2	0.2	1
Q424	0	4.9	0
Q425	0	4.98	0
Q801	2.9	3.5	
Q803	2.9	3.5	

	E	B	C
Q807	8.2	7.4	8.1
Q809	0	0.7	0.1
Q811	0	0.43	9.2
Q812	2.5	2.9	11.6

	S	G	D
Q408	8.2	7.4	8.1
Q804	0	0.7	0.1
Q810	0	0.43	9.2
	K	G	A
Q812	19.5	18.8	127



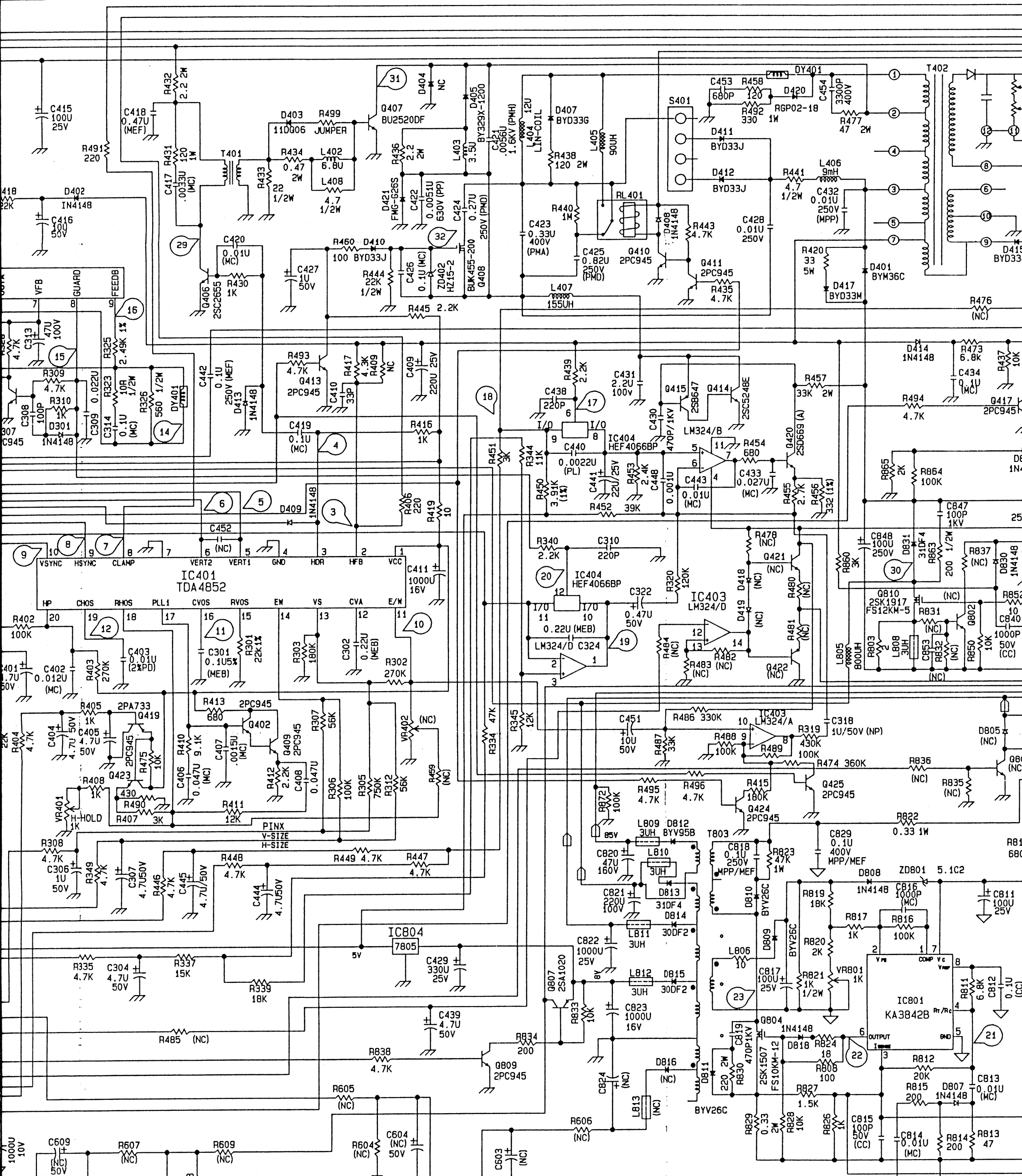




15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42
0	0	5	5	5	5	0	0	0.8	3	3.2	0	0	0	3.2	2.6	2.7	0	5	4.9	2.4	0	4.2	4.6	4.2	5	0	3.2
2.9	3.8	5.6	2.5	5.2	5.3																						

CRT	PHILIPS	CPT	SAMSUNG
V901	M36EDR320X131/2F01	M36AES83X46	M36KUK35X30
C422	0.0051U	0.0056U	0.0051U
R319	430K	300K	360K
R325	2.49K	2.2K	2.26K
R453	2.4K	2.7K	2.7K
R326	560	270	360
R975	3	3	1.3
R921	3	3	1.3
R470	200K	160K	200K
R327	150K	110K	110K
R339	18K	15K	18K
R334	47K	39K	47K
C423	0.33U/400V	0.33U/400V	0.27U/400V
C424	0.27U/250V	0.27U/250V	0.22U/250V
C425	0.82U/250V	0.82U/250V	0.68U/250V

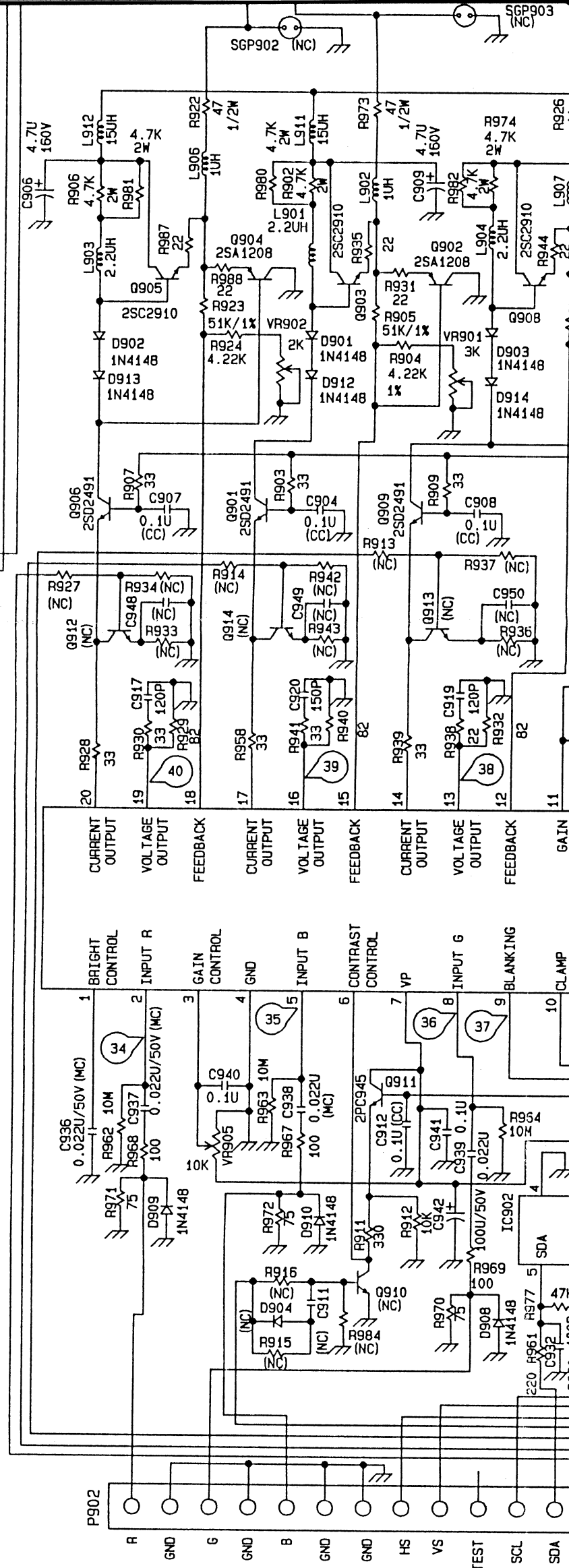
B	C	E	B	C	S	G	D
1.6	25.1	0.807	8.2	7.4	8.1		
0.2	1	0.809	0	0.7	0.1		
4.9	0	0.811	0	0.43	9.2		
4.98	0	0.812	2.5	2.9	11.6		
3.5							
3.5							



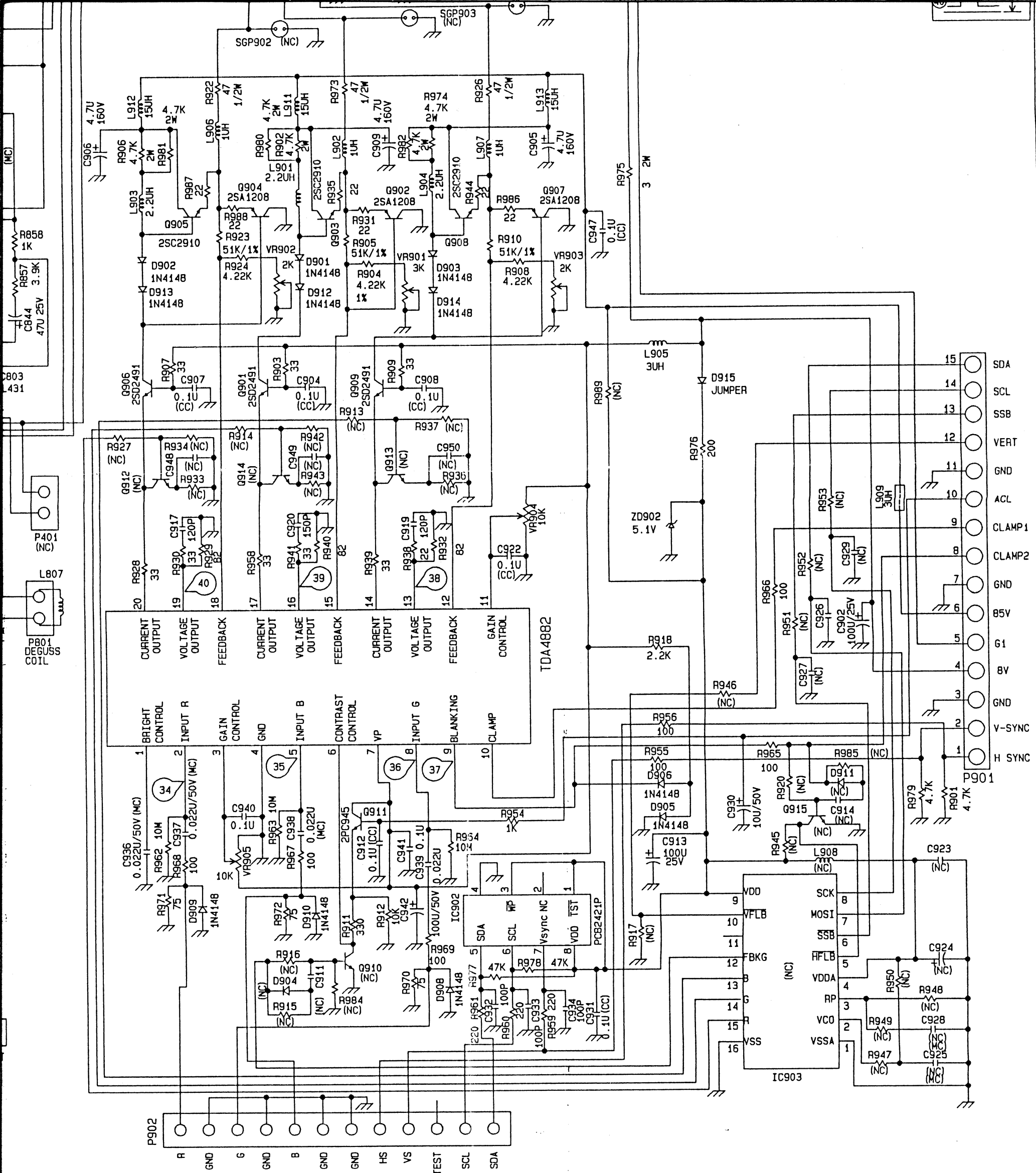
The schematic diagram illustrates the internal circuitry of a television receiver, organized into several functional blocks:

- Power Supply Section (Top Left):** Features a power transformer (T402) with multiple secondary windings. The primary is connected to a 250V AC source. The secondary windings provide various voltages for the receiver's operation, including 5.1kV for the CRT anode, 100V for the horizontal deflection yoke, and 250V for the vertical deflection yoke. The power supply includes a full-wave rectifier (D420, D421, D422) and a filter capacitor (C428).
- Video Amplifier Section (Middle Left):** Processes the video signal from the antenna or video head. It includes a video detector (Q414), a video amplifier (Q415), and a video output stage (Q416). The video signal is then processed by a video processor (Q417) and a video amplifier (Q418).
- Control Section (Bottom Left):** Contains the horizontal and vertical deflection circuits. The horizontal deflection circuit includes a horizontal sync separator (Q419), a horizontal sync separator (Q420), and a horizontal sync separator (Q421). The vertical deflection circuit includes a vertical sync separator (Q422), a vertical sync separator (Q423), and a vertical sync separator (Q424).
- Output Stage (Right):** The video signal is sent to the CRT through a video output stage (Q425) and a video output stage (Q426). The horizontal deflection signal is sent to the CRT through a horizontal deflection stage (Q427) and a horizontal deflection stage (Q428).
- Control Inputs (Bottom Right):** The schematic shows various control inputs for the receiver, including BRIGHT, CONTRAST, GAIN, and CLAMP. These inputs are connected to the receiver's control circuitry through a series of resistors and capacitors.

The schematic is a detailed representation of the receiver's internal components and their interconnections. It includes a list of components at the bottom right, which identifies the various parts used in the circuit.



MARK	DATE	CONTENT



						DRAWN	CHECK	APPROVRL	ISSUE
						OPTIQUEST - Q53			
						DRAW NAME	SCHEMATIC DIAGRAM MAIN & POWER		
						DRAW NO. SBA	Page: 1	Next: 2	REV: 6.05
MARK	DATE	CONTENT OF MODIFY	SIGN	VCDTS21359-1					

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
IC901	2.2	3.8	3.4	0	3.8	5.1	8.3	3.8	4.8	4.8	4.7	6	2	7.1	6	1.4	7.4	6	1.2	8
IC902	5.4	5.4	0	0	0	5	4.8	5.4												

	E	B	C
Q901	7.5	8.1	67
Q902	66.9	67.1	
Q903	67	67	82.7
Q904	7.5	71.8	
Q905	56.9	72.5	82.6
Q906	7.5	8.1	71.6
Q907	53	67	

	E	B	C
Q908	52	68.6	82.7
Q909	7.4	8	67.8
Q911	5.4	6	8.1

